Seafile

Sharing & Collaboration

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Introduction

Seafile is an open source cloud storage system with file encryption and group sharing.

Collections of files are called libraries, and each library can be synced separately. A library can be encrypted with a user chosen password. This password is not stored on the server, so even the server admin cannot view a file's contents.

Seafile allows users to create groups with file syncing, a wiki and discussions to enable easy collaboration around documents within a team.

LICENSE

The different components of Seafile project are released under different licenses:

- Seafile iOS client: Apache License v2
- Seafile Android client: GPLv3
- Desktop syncing client: GPLv2
- Seafile Server core: AGPLv3
- Seahub (Seafile server Web UI): Apache License v2

About this manual

The "source code" of this manual is hosted on GitHub: https://github.com/haiwen/seafile-docs

Contact information

- Twitter: @seafile https://twitter.com/seafile
- Forum: https://forum.seafile.com

More Documents

- Wiki containing general information of Seafile

Overview

- Seafile Components
- File permission management
- FAQ
- Changelog
- Roadmap
- Contribution

Components Overview

Seafile server consists of following components:

- **Seahub** (django)：the web frontend. Seafile server package contains a light-weight Python HTTP server gunicorn that serves the website. By default, Seahub runs as an application within gunicorn. You can also configure Seahub to run under fast-cgi mode, behind Nginx or Apache. This is recommended for production setups.
- **Seafile server** (`seaf-server`)：data service daemon, handles raw file upload, download and synchronization. Seafile server by default listens on port 8082. You can configure Nginx/Apache to proxy traffic to the local 8082 port.
- **Ccnet server** (`ccnet-server`)： RPC service daemon to enable communication among multiple components. Ccnet is only used for internal communication.

The picture below shows how Seafile clients access files when you configure Seafile behind Nginx/Apache.
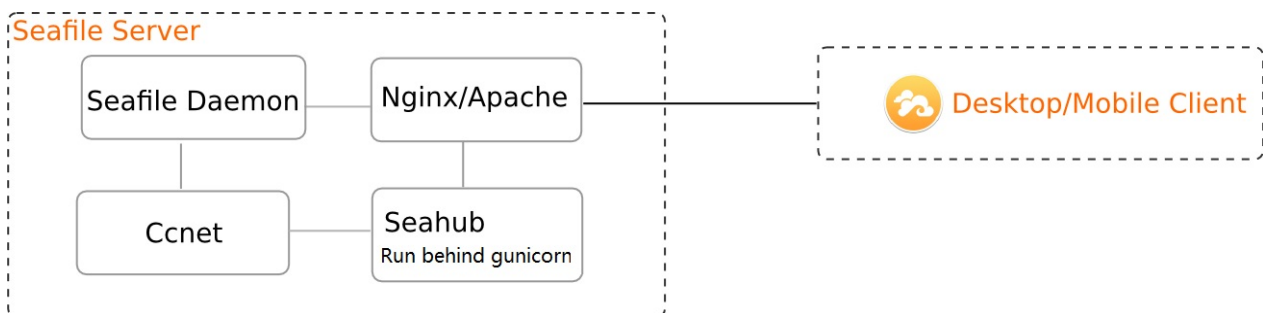
- All access to the Seafile service (including Seahub and Seafile server) can be configured behind Nginx or Apache web server. This way all network traffic to the service can be encrypted with HTTPS.
- When user accesses Seahub, Seahub accesses data from Seafile server using Ccnet RPC.

File permission management

Seafile manages files using libraries. Every library has an owner, who can share the library to other users or share it with groups. The sharing can be read-only or read-write.

Read-only syncing

Read-only libraries can be synced to local desktop. The modifications at the client will not be synced back. If a user has modified some file contents, he can use "resync" to revert the modifications.

Cascading permission/Sub-folder permissions (Pro edition)

Sharing controls whether a user or group can see a library, while sub-foler permissions are used to modify permissions on specific folders.

Supposing you share a library as read-only to a group and then want specific sub-folders to be read-write for a few users, you can set read-write permissions on sub-folders for some users and groups.

Note:

- Setting sub-folder permission for a user without sharing the folder or parent folder to that user will have no effect.
- Sharing a library read-only to a user and then sharing a sub-folder read-write to that user will lead to two shared items for that user. This is going to cause confusion. Use sub-folder permissions instead.

Roadmap

Please check https://www.seafile.com/en/roadmap/

FAQ

Please check the FAQ section

Changelog

Changelogs

- Seafile Community Edition
- Seafile Professional Edition
- Seafile Client
- Drive Client ChangeLog

Contribution

Licensing

The different components of Seafile project are released under different licenses:

- Seafile iOS client: Apache License v2
- Seafile Android client: GPLv3
- Desktop syncing client: GPLv2
- Seafile Server core: AGPLv3
- Seahub (Seafile server Web UI): Apache License v2

Discussion

Forum: https://forum.seafile.com

Follow us @seafile https://twitter.com/seafile

Report a Bug

- Find the existing issues that fit your situation if any, or create a new issue. We are using Github as our issue tracker https://github.com/haiwen/seafile/issues?state=open

Code Style

The source code of seafile is ISO/IEC 9899:1999 (E) (a.k.a. C99) compatible. Take a look at code standard.

Deploying Seafile under Linux

Here we describe how to deploy Seafile from prebuild binary packages.

Deploy Seafile in Home/Personal Environment

- Deploying Seafile with SQLite

Deploy Seafile in Production/Enterprise Environment

In production environment we recommend using MySQL as the database and config Seafile web behing Nginx or Apache. For those who are not familiar with Nginx and Apache. We recommend Nginx, since it is easier to config than Apache.

Note: We have prepared an installation script Deploy Seafile with an installation script. The installer offer a quick and easy way to set up a production ready Seafile Server using MariaDB, Memcached and NGINX as a reverse proxy in under 5 minutes.

You can also install Seafile manually without the installation script as following:

Basic:

- Deploying Seafile with MySQL
- Config Seahub with Nginx
- Enabling Https with Nginx
- Config Seahub with Apache
- Enabling Https with Apache

Advanced:

- Add Memcached, adding memcached is very important if you have more than 50 users.
- Start Seafile at System Bootup
- Firewall settings
- Logrotate

User Authentication:

Seafile supports a few external user authentication methods.

- Configure Seafile to use LDAP
- Shibboleth Authentication
- Kerberos Authentication

Other Deployment Issues

- Deploy Seafile behind NAT

- Deploy Seahub at Non-root domain
- Migrate From SQLite to MySQL

Check configuration options for server config options like enabling user registration.

Read here if you have troubles setting up Seafile server

1. Read Seafile Server Components Overview to understand how Seafile server works. This will save you a lot of time.
2. Common Problems for Setting up Server
3. Go to our forum for help.

Upgrade Seafile Server

- Upgrade Seafile server

For those that want to package Seafile server

If you want to package seafile yourself, (e.g. for your favorite Linux distribution), you should always use the correspondent tags:

- When we release a new version of seafile client, say 3.0.1, we will add tags `v3.0.1` to ccnet, seafile and seafile-client.
- Likewise, when we release a new version of seafile server, say 3.0.1, we will add tags `v3.0.1-server` to ccnet, seafile and seahub.
- For libsearpc, we always use tag `v3.0-latest`.

Note: The version numbers of each project has nothing to do with the tag name.

Deploying Seafile with SQLite

Download binary package

Visit our download page, download the latest server package.

Choose one of:

- Generic Linux
- Windows
- Server for Raspberry Pi

```
#check if your system is x86 (32bit) or x86_64 (64 bit)
uname -m
```

Click the tarball link and save it.

Deploying and Directory Layout

NOTE: If you place the Seafile data directory in external storage, such as NFS, CIFS mount, you should not use SQLite as the database, but use MySQL instead.

Supposed your organization's name is "haiwen", and you've downloaded seafile-server*1.4.0* into your home directory. We suggest you to use the following layout for your deployment:

```
mkdir haiwen
mv seafile-server_* haiwen
cd haiwen
# after moving seafile-server_* to this directory
tar -xzf seafile-server_*
mkdir installed
mv seafile-server_* installed
```

Now you should have the following directory layout

```
# tree . -L 2
.
├── installed
│   └── seafile-server_1.4.0_x86-64.tar.gz
└── seafile-server-1.4.0
    ├── reset-admin.sh
    ├── runtime
    ├── seafile
    ├── seafile.sh
    ├── seahub
    ├── seahub.sh
    ├── setup-seafile.sh
    └── upgrade
```

Benefits of this layout are

- We can place all the config files for Seafile server inside "haiwen" directory, making it easier to manage.
- When you upgrade to a new version of Seafile, you can simply untar the latest package into "haiwen" directory. In this way you can reuse the existing config files in "haiwen" directory and don't need to configure again.

Setting Up Seafile Server

Prerequisites

The Seafile server package requires the following packages have been installed in your system

- python 2.7
- python-setuptools
- python-imaging
- python-ldap
- python-urllib3
- sqlite3

```
#on Debian/Ubuntu 14.04 server
apt-get update
apt-get install python2.7 libpython2.7 python-setuptools python-imaging python-ldap py
thon-urllib3 sqlite3
```

```
# on Ubuntu 16.04 server
# As the default python binary on Ubuntu 16.04 server is python 3, we need to install
python (python 2) first.
apt-get update
apt-get install python
apt-get install python2.7 libpython2.7 python-setuptools python-imaging python-ldap py
thon-urllib3 ffmpeg python-pip sqlite3
pip install pillow moviepy
```

```
# on CentOS 7
yum -y install epel-release
rpm --import http://li.nux.ro/download/nux/RPM-GPG-KEY-nux.ro
yum -y install python-imaging MySQL-python python-memcached python-ldap python-urllib3
 ffmpeg ffmpeg-devel
pip install pillow moviepy
```

Setup

```
cd seafile-server-*
./setup-seafile.sh  #run the setup script & answer prompted questions
```

If some of the prerequisites are not installed, the Seafile initialization script will ask you to install them.

The script will guide you through the settings of various configuration options.

Seafile configuration options

Option	Description	Note
server name	Name of this Seafile server	3-15 characters, only English letters, digits and underscore ('_') are allowed
server ip or domain	The IP address or domain name used by this server	Seafile client program will access the server with this address
Seafile data dir	Seafile stores your data in this directory. By default it'll be placed in the current directory.	The size of this directory will increase as you put more and more data into Seafile. Please select a disk partition with enough free space.
fileserver port	The TCP port used by Seafile fileserver	Default is 8082. If it's been used by other service, you can set it to another port.

Now you should have the following directory layout:

```
#tree haiwen -L 2
haiwen
├── ccnet                # configuration files
│   ├── mykey.peer
│   ├── PeerMgr
│   └── seafile.ini
├── conf
│   └── ccnet.conf
│   └── seafile.conf
│   └── seahub_settings.py
├── installed
│   └── seafile-server_1.4.0_x86-64.tar.gz
├── seafile-data
├── seafile-server-1.4.0  # active version
│   ├── reset-admin.sh
│   ├── runtime
│   ├── seafile
│   ├── seafile.sh
│   ├── seahub
│   ├── seahub.sh
│   ├── setup-seafile.sh
│   └── upgrade
├── seafile-server-latest  # symbolic link to seafile-server-1.4.0
├── seahub-data
│   └── avatars
├── seahub.db
```

The folder seafile-server-latest is a symbolic link to the current Seafile server folder. When later you upgrade to a new version, the upgrade scripts would update this link to keep it always point to the latest Seafile server folder.

Running Seafile Server

Before Running

Since Seafile uses persistent connections between client and server, you should increase Linux file descriptors by ulimit if you have a large number of clients before start Seafile, like:

```
ulimit -n 30000
```

Starting Seafile Server and Seahub Website

- Start Seafile:

    ```
    ./seafile.sh start # Start Seafile service
    ```

- Start Seahub:

```
./seahub.sh start <port>  # Start Seahub website, port defaults to 8000
```

Note: The first time you start Seahub, the script is going to prompt you to create an admin account for your Seafile server.

After starting the services, you may open a web browser and type in

```
http://192.168.1.111:8000
```

you will be redirected to the Login page. Just enter the admin username and password.

Congratulations! Now you have successfully setup your private Seafile server.

Run Seahub on another port

If you want to run Seahub on a port other than the default 8000, say 8001, you must:

- stop the Seafile server

```
./seahub.sh stop
./seafile.sh stop
```

- modify the value of SERVICE_URL in the file ccnet.conf, like this: (assume your ip or domain is 192.168.1.100). You can also modify SERVICE_URL via web UI in "System Admin->Settings". (**Warning**: if you set the value both via Web UI and ccnet.conf, the setting via Web UI will take precedence.)

```
SERVICE_URL = http://192.168.1.100:8001
```

- restart Seafile server

```
./seafile.sh start
./seahub.sh start 8001
```

See Seafile Server Configuration Manual for more details about `ccnet.conf` .

Manage Seafile and Seahub

Stopping

```
./seahub.sh stop # stop seahub website
./seafile.sh stop # stop seafile processes
```

Restarting

```
./seafile.sh restart
./seahub.sh restart
```

When the Scripts Fail

Most of the time, `seafile.sh` and `seahub.sh` work fine. But if they fail, you might want to

- Use pgrep command to check if Seafile/Seahub processes are still running

```
pgrep -f seafile-controller # check Seafile processes
pgrep -f "seahub" # check Seahub process
```

- Use pkill to kill the processes

```
pkill -f seafile-controller
pkill -f "seahub"
```

Setup in non-interactive way

Since Seafile version 5.1.4, `setup-seafile.sh` supports auto mode. You can run the setup script in non-interactive by supply the needed parameters via script parameters or environment variables.

```
cd seafile-server-*
./setup-seafile.sh auto [param1] [param2]...
```

Related parameters as follow:

Option	Script parameter	Environment variable	Default value
server name	-n	SERVER_NAME	hostname -s(short host name)
server ip or domain	-i	SERVER_IP	hostname -i(address for the host name)
fileserver port	-p	FILESERVER_PORT	8082
seafile data dir	-d	SEAFILE_DIR	current directory

Note: If both script parameter and environment variable assigned, script parameter has higher priority. If neither script parameter nor environment variable assigned, default value will be used.

That's it!

For a production server we highly recommend to setup with Nginx/Apache and enable SSL/TLS.

That's it! Now you might want read more about Seafile.

- Administration

Deploying Seafile with MySQL

This manual explains how to setup and run Seafile server from a pre-built package with MySQL.

Download

Download the latest server package.

Deploying and Directory Layout

Supposed your organization's name is "haiwen", and you've downloaded `seafile-server_1.8.2_*` into your home directory. We suggest you to to use the following layout for your deployment:

```
mkdir haiwen
mv seafile-server_* haiwen
cd haiwen
# after moving seafile-server_* to this directory
tar -xzf seafile-server_*
mkdir installed
mv seafile-server_* installed
```

Now you should have the following directory layout

```
#tree haiwen -L 2
haiwen
├── installed
│   └── seafile-server_1.8.2_x86-64.tar.gz
└── seafile-server-1.8.2
    ├── reset-admin.sh
    ├── runtime
    ├── seafile
    ├── seafile.sh
    ├── seahub
    ├── seahub.sh
    ├── setup-seafile.sh
    └── upgrade
```

The benefit of this layout is that:

- We can place all the config files for Seafile server inside "haiwen" directory, making it easier to manage.

- When you upgrade to a new version of Seafile, you can simply untar the latest package into "haiwen" directory. In this way you can reuse the existing config files in "haiwen" directory and don't need to configure again.

Prepare MySQL Databases

Three components of Seafile Server need their own databases:

- ccnet server
- seafile server
- seahub

See Seafile Server Components Overview if you want to know more about the Seafile server components.

There are two ways to intialize the databases:

- let the `setup-seafile-mysql.sh` script create the databases for you.
- create the databases by yourself, or someone else (the database admin, for example)

We recommend the first way. The script would ask you for the root password of the mysql server, and it will create:

- database for ccnet/seafile/seahub.
- a new user to access these databases

However, sometimes you have to use the second way. If you don't have the root password, you need someone who has the privileges, e.g., the database admin, to create the three databases, as well as a mysql user who can access the three databases for you. For example, to create three databases: `ccnet-db` / `seafile-db` / `seahub-db` for ccnet/seafile/seahub respectively, and a mysql user "seafile" to access these databases run the following SQL queries:

```
create database `ccnet-db` character set = 'utf8';
create database `seafile-db` character set = 'utf8';
create database `seahub-db` character set = 'utf8';

create user 'seafile'@'localhost' identified by 'seafile';

GRANT ALL PRIVILEGES ON `ccnet-db`.* to `seafile`@localhost;
GRANT ALL PRIVILEGES ON `seafile-db`.* to `seafile`@localhost;
GRANT ALL PRIVILEGES ON `seahub-db`.* to `seafile`@localhost;
```

Setting Up Seafile Server

Prerequisites

The Seafile server package requires the following packages to be installed on your system

- python 2.7
- python-setuptools
- python-imaging
- python-ldap
- python-mysqldb
- python-urllib3
- python-memcache (or python-memcached)

```
# on Debian/Ubuntu 14.04 server
apt-get update
apt-get install python2.7 libpython2.7 python-setuptools python-imaging \
  python-ldap python-mysqldb python-memcache python-urllib3
```

```
# on Ubuntu 16.04 server
# As the default python binary on Ubuntu 16.04 server is python 3, we need to install
python (python 2) first.
apt-get update
apt-get install python
apt-get install python2.7 libpython2.7 python-setuptools python-imaging python-ldap py
thon-urllib3 ffmpeg python-pip python-mysqldb python-memcache
pip install pillow moviepy
```

```
# on CentOS 7
yum -y install epel-release
rpm --import http://li.nux.ro/download/nux/RPM-GPG-KEY-nux.ro
yum -y install python-imaging MySQL-python python-memcached python-ldap python-urllib3
 ffmpeg ffmpeg-devel
pip install pillow moviepy
```

Setup

```
cd seafile-server-*
./setup-seafile-mysql.sh  #run the setup script & answer prompted questions
```

If some of the prerequisites are not installed, the Seafile initialization script will ask you to install them.

The script will guide you through the settings of various configuration options.

Seafile configuration options

Option	Description	Note
server name	Name of this seafile server	3-15 characters, only English letters, digits and underscore ('_') are allowed
server ip or domain	The IP address or domain name used by this server	Seafile client program will access the server with this address
seafile data dir	Seafile stores your data in this directory. By default it'll be placed in the current directory.	The size of this directory will increase as you put more and more data into Seafile. Please select a disk partition with enough free space.
fileserver port	The TCP port used by Seafile fileserver	Default is 8082. If it's been used by other service, you can set it to another port.

At this moment, you will be asked to choose a way to initialize Seafile databases:

```
-------------------------------------------------------
Please choose a way to initialize Seafile databases:
-------------------------------------------------------


[1] Create new ccnet/seafile/seahub databases
[2] Use existing ccnet/seafile/seahub databases
```

Which one to choose depends on if you have the root password.

- If you choose "1", you need to provide the root password. The script would create the databases and a new user to access the databases
- If you choose "2", the ccnet/seafile/seahub databases must have already been created, either by you, or someone else.

If you choose "[1] Create new ccnet/seafile/seahub databases", you would be asked these questions:

Question	Description	Note
mysql server host	the host address of the mysql server	the default is localhost
mysql server port	the port of the mysql server	the default is 3306. Almost every mysql server uses this port.
root password	the password of mysql root account	the root password is required to create new databases and a new user
mysql user for Seafile	the username for Seafile programs to use to access MySQL server	if the user does not exist, it would be created
password for Seafile mysql user	the password for the user above	
ccnet dabase name	the name of the database used by ccnet, default is "ccnet-db"	the database would be created if not existing
seafile dabase name	the name of the database used by Seafile, default is "seafile-db"	the database would be created if not existing
seahub dabase name	the name of the database used by seahub, default is "seahub-db"	the database would be created if not existing

If you choose "[2] Use existing ccnet/seafile/seahub databases", you would be asked these questions:

related questions for "Use existing ccnet/seafile/seahub databases"

Question	Description	Note
mysql server host	the host address of the mysql server	the default is localhost
mysql server port	the port of the mysql server	the default is 3306. Almost every mysql server uses this port
mysql user for Seafile	the user for Seafile programs to use to access MySQL server	the user must already exists
password for Seafile mysql user	the password for the user above	
ccnet dabase name	the name of the database used by ccnet	this database must already exist
seafile dabase name	the name of the database used by Seafile, default is "seafile-db"	this database must already exist
seahub dabase name	the name of the database used by Seahub, default is "seahub-db"	this database must already exist

If the setup is successful, you'll see the following output

```
-----------------------------------------------------------
Your seafile server configuration has been finished successfully.
-----------------------------------------------------------

run seafile server:     ./seafile.sh { start | stop | restart }
run seahub  server:     ./seahub.sh  { start <port> | stop | restart <port> }

-----------------------------------------------------------
If you are behind a firewall, remember to allow input/output of these tcp ports:
-----------------------------------------------------------

port of ccnet server:        10001
port of seafile server:      12001
port of httpserver server:   8082
port of seahub:              8000

When problems occur, Refer to

     https://github.com/haiwen/seafile/wiki

for information.
```

Now you should have the following directory layout :

```
#tree haiwen -L 2
haiwen
├── ccnet                # configuration files
│   ├── mykey.peer
│   ├── PeerMgr
│   └── seafile.ini
├── conf
│   └── ccnet.conf
│   └── seafile.conf
│   └── seahub_settings.py
├── installed
│   └── seafile-server_1.8.2_x86-64.tar.gz
├── seafile-data
├── seafile-server-1.8.2  # active version
│   ├── reset-admin.sh
│   ├── runtime
│   ├── seafile
│   ├── seafile.sh
│   ├── seahub
│   ├── seahub.sh
│   ├── setup-seafile.sh
│   └── upgrade
├── seafile-server-latest  # symbolic link to seafile-server-1.8.2
├── seahub-data
│   └── avatars
```

The folder `seafile-server-latest` is a symbolic link to the current Seafile server folder.
When later you upgrade to a new version, the upgrade scripts update this link to point to the
latest Seafile Server folder.

Running Seafile Server

Starting Seafile Server and Seahub Website

Under seafile-server-1.8.2 directory, run the following commands

```
./seafile.sh start # Start Seafile service
./seahub.sh start <port>  # Start seahub website, port defaults to 8000
```

Note: The first time you start Seahub, the script would prompt you to create an admin
account for your Seafile Server.

After starting the services, you may open a web browser and visit Seafile web interface at
(assume your server IP is 192.168.1.111):

```
http://192.168.1.111:8000/
```

Congratulations! Now you have successfully setup your private Seafile Server.

Run Seahub on another port

If you want to run Seahub on another port than the default port 8000, say 8001, you must:

- stop the Seafile Server

```
./seahub.sh stop
./seafile.sh stop
```

- modify the value of `SERVICE_URL` in the file [ccnet.conf](), like this: (assume your ip or domain is `192.168.1.111`). You can also modify `SERVICE_URL` via web UI in "System Admin->Settings". (**Warning**: if you set the value both via Web UI and ccnet.conf, the setting via Web UI will take precedence.)

```
SERVICE_URL = http://192.168.1.111:8001
```

- restart Seafile Server

```
./seafile.sh start
./seahub.sh start 8001
```

see [Seafile server configuration options]() for more details about `ccnet.conf` .

Stopping and Restarting Seafile and Seahub

Stopping

```
./seahub.sh stop # stop Seahub website
./seafile.sh stop # stop Seafile processes
```

Restarting

```
./seafile.sh restart
./seahub.sh restart
```

When the Scripts Fail

Most of the time, seafile.sh and seahub.sh work fine. But if they fail, you may

- Use `pgrep` command to check if seafile/seahub processes are still running

```
pgrep -f seafile-controller # check seafile processes
pgrep -f "seahub" # check seahub process
```

- Use `pkill` to kill the processes

```
pkill -f seafile-controller
pkill -f "seahub"
```

Performance turning

If you have more than 50 users, we highly recommand you to add memcached. This is going to greatly speed up Seahub (the web frontend).

Setup in non-interactive way

Since Seafile Pro Edition version 5.1.4, `setup-seafile-mysql.sh` supports auto mode. You can run the setup script in non-interactive by supplying the needed parameters via script parameters or environment variables.

```
cd seafile-server-*
./setup-seafile-mysql.sh auto [param1] [param2]...
```

Related parameters as follow:

Option	Script parameter	Environment variable	Default value
server name	-n	SERVER_NAME	hostname -s(short host name)
server ip or domain	-i	SERVER_IP	hostname -i(address for the host name)
fileserver port	-p	FILESERVER_PORT	8082
seafile data dir	-d	SEAFILE_DIR	current directory
use existing db	-e	USE_EXISTING_DB	0(create new db)
mysql server host	-o	MYSQL_HOST	127.0.0.1
mysql server port	-t	MYSQL_PORT	3306
mysql root password	-r	MYSQL_ROOT_PASSWD	no default value(must be set when create new db)
mysql user for seafile	-u	MYSQL_USER	no default value(must be set)
password for seafile mysql user	-w	MYSQL_USER_PASSWD	no default value(must be set)
mysql user host	-q	MYSQL_USER_HOST	no default value(must be set when create new db and using non local mysql server)
ccnet dabase name	-c	CCNET_DB	ccnet-db
seafile dabase name	-s	SEAFILE_DB	seafile-db
seahub dabase name	-b	SEAHUB_DB	seahub-db

Note: If both script parameter and environment variable assigned, script parameter has higher priority. If neither script parameter nor environment variable assigned, default value will be used.

That's it!

That's it! Now you may want read more about Seafile.

- Deploy Seafile with Nginx / Deploy Seafile with Apache

- Enable Https on Seafile Web with Nginx / Enable Https on Seafile Web with Apache
- Configure Seafile to use LDAP
- How to manage the server

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- Enable Https on Seafile Web with Nginx / Enable Https on Seafile Web with Apache
- Configure Seafile to use LDAP
- How to manage the server

Config Seahub with Nginx

Deploy Seahub/FileServer with Nginx

Seahub is the web interface of Seafile server. FileServer is used to handle raw file uploading/downloading through browsers. By default, it listens on port 8082 for HTTP requests.

Here we deploy Seahub and FileServer with reverse proxy. We assume you are running Seahub using domain `seafile.example.com` .

This is a sample Nginx config file.

In Ubuntu 16.04, you can add the config file as follows:

1. create file `/etc/nginx/sites-available/seafile.conf`
2. Delete `/etc/nginx/sites-enabled/default` : `rm /etc/nginx/sites-enabled/default`
3. Create symbolic link: `ln -s /etc/nginx/sites-available/seafile.conf /etc/nginx/sites-enabled/seafile.conf`

```
server {
    listen 80;
    server_name seafile.example.com;

    proxy_set_header X-Forwarded-For $remote_addr;

    location / {
        proxy_pass         http://127.0.0.1:8000;
        proxy_set_header   Host $host;
        proxy_set_header   X-Real-IP $remote_addr;
        proxy_set_header   X-Forwarded-For $proxy_add_x_forwarded_for;
        proxy_set_header   X-Forwarded-Host $server_name;
        proxy_read_timeout  1200s;

        # used for view/edit office file via Office Online Server
        client_max_body_size 0;

        access_log      /var/log/nginx/seahub.access.log;
        error_log       /var/log/nginx/seahub.error.log;
    }

# If you are using [FastCGI](http://en.wikipedia.org/wiki/FastCGI),
# which is not recommended, you should use the following config for location `/`.
#
#   location / {
#       fastcgi_pass    127.0.0.1:8000;
#       fastcgi_param   SCRIPT_FILENAME     $document_root$fastcgi_script_name;
#       fastcgi_param   PATH_INFO           $fastcgi_script_name;
```

Config Seahub with Nginx

```
#
#        fastcgi_param    SERVER_PROTOCOL    $server_protocol;
#        fastcgi_param    QUERY_STRING       $query_string;
#        fastcgi_param    REQUEST_METHOD     $request_method;
#        fastcgi_param    CONTENT_TYPE       $content_type;
#        fastcgi_param    CONTENT_LENGTH     $content_length;
#        fastcgi_param    SERVER_ADDR        $server_addr;
#        fastcgi_param    SERVER_PORT        $server_port;
#        fastcgi_param    SERVER_NAME        $server_name;
#        fastcgi_param    REMOTE_ADDR        $remote_addr;
#         fastcgi_read_timeout 36000;
#
#        client_max_body_size 0;
#
#        access_log      /var/log/nginx/seahub.access.log;
#         error_log       /var/log/nginx/seahub.error.log;
#    }

    location /seafhttp {
        rewrite ^/seafhttp(.*)$ $1 break;
        proxy_pass http://127.0.0.1:8082;
        client_max_body_size 0;

        proxy_connect_timeout  36000s;
        proxy_read_timeout  36000s;
        proxy_send_timeout  36000s;

        send_timeout  36000s;
    }
    location /media {
        root /home/user/haiwen/seafile-server-latest/seahub;
    }
}
```

Nginx settings `client_max_body_size` is by default 1M. Uploading a file bigger than this limit will give you an error message HTTP error code 413 ("Request Entity Too Large").

You should use 0 to disable this feature or write the same value than for the parameter `max_upload_size` in section `[fileserver]` of seafile.conf. Client uploads are only partly effected by this limit. With a limit of 100 MiB they can safely upload files of any size.

Tip for uploading very large files (> 4GB): By default Nginx will buffer large request bodies in temp files. After the body is completely received, Nginx will send the body to the upstream server (seaf-server in our case). But it seems when the file size is very large, the buffering mechanism dosen't work well. It may stop proxying the body in the middle. So if you want to support file uploads larger than 4GB, we suggest to install Nginx version >= 1.8.0 and add the following options to Nginx config file:

```
location /seafhttp {
    ... ...
    proxy_request_buffering off;
}
```

Modify ccnet.conf and seahub_setting.py

Modify ccnet.conf

You need to modify the value of `SERVICE_URL` in [ccnet.conf](#) to let Seafile know the domain, protocol and port you choose. You can also modify `SERVICE_URL` via web UI in "System Admin->Settings". (**Warning**: If you set the value both via Web UI and ccnet.conf, the setting via Web UI will take precedence.)

```
SERVICE_URL = http://seafile.example.com
```

Note: If you later change the domain assigned to Seahub, you also need to change the value of `SERVICE_URL` .

Modify seahub_settings.py

You need to add a line in `seahub_settings.py` to set the value of `FILE_SERVER_ROOT` . You can also modify `FILE_SERVER_ROOT` via web UI in "System Admin->Settings". (**Warning**: if you set the value both via Web UI and seahub_settings.py, the setting via Web UI will take precedence.)

```
FILE_SERVER_ROOT = 'http://seafile.example.com/seafhttp'
```

Start Seafile and Seahub

```
./seafile.sh start
./seafile.sh start # or "./seahub.sh start-fastcgi" if you're using fastcgi
```

Enabling Https with Nginx

Here we suggest you use Let's Encrypt to get a certificate from a Certificate Authority (CA). If you use a paid ssl certificate from some authority, just skip the first step.

Generate SSL certificate

For users who use Let's Encrypt, you can obtain a valid certificate via Certbot ACME client

On Ubuntu systems, the Certbot team maintains a PPA. Once you add it to your list of repositories all you'll need to do is apt-get the following packages.

```
sudo apt-get update
sudo apt-get install software-properties-common
sudo add-apt-repository ppa:certbot/certbot
sudo apt-get update
sudo apt-get install python-certbot-nginx
```

Certbot has an Nginx plugin, which is supported on many platforms, and automates both obtaining and installing certs:

```
sudo certbot --nginx
```

Running this command will get a certificate for you and have Certbot edit your Nginx configuration automatically to serve it. If you're feeling more conservative and would like to make the changes to your Nginx configuration by hand, you can use the certonly subcommand:

```
sudo certbot --nginx certonly
```

To learn more about how to use Certbot you can read threir documentation.

> If you're using a custom CA to sign your SSL certificate, you have to enable certificate revocation list (CRL) in your certificate. Otherwise http syncing on Windows client may not work. See this thread for more information.

Enable SSL module of Nginx (optional)

If your Nginx does not support SSL, you need to recompile it, the commands are as follows:

```
./configure --with-http_stub_status_module --with-http_ssl_module
make && make install
```

Modify Nginx configuration file

Assume you have configured nginx as Deploy-Seafile-with-nginx. To use https, you need to modify your nginx configuration file.

```
server {
    listen       80;
    server_name  seafile.example.com;
    rewrite ^ https://$http_host$request_uri? permanent;    # force redirect http to h
ttps

    # Enables or disables emitting nginx version on error pages and in the "Server" re
sponse header field.
    server_tokens off;
}

server {
    listen 443;
    ssl on;
    ssl_certificate /etc/ssl/cacert.pem;       # path to your cacert.pem
    ssl_certificate_key /etc/ssl/privkey.pem;    # path to your privkey.pem
    server_name seafile.example.com;
    server_tokens off;
    # ......
    proxy_pass         http://127.0.0.1:8000;
    proxy_set_header   Host $host;
    proxy_set_header   X-Real-IP $remote_addr;
    proxy_set_header   X-Forwarded-For $proxy_add_x_forwarded_for;
    proxy_set_header   X-Forwarded-Host $server_name;
    proxy_set_header   X-Forwarded-Proto https;

    proxy_read_timeout  1200s;
}
```

Sample configuration file

Generate DH params

(this takes some time)

```
    openssl dhparam 2048 > /etc/nginx/dhparam.pem
```

Here is the sample configuration file:

```
    server {
        listen       80;
        server_name  seafile.example.com;
        rewrite ^ https://$http_host$request_uri? permanent;    # force redirect http
to https
        server_tokens off;
```

```nginx
    }
    server {
        listen 443;
        ssl on;
        ssl_certificate /etc/ssl/cacert.pem;        # path to your cacert.pem
        ssl_certificate_key /etc/ssl/privkey.pem;    # path to your privkey.pem
        server_name seafile.example.com;
        ssl_session_timeout 5m;
        ssl_session_cache shared:SSL:5m;

        # Diffie-Hellman parameter for DHE ciphersuites, recommended 2048 bits
        ssl_dhparam /etc/nginx/dhparam.pem;

        # secure settings (A+ at SSL Labs ssltest at time of writing)
        # see https://wiki.mozilla.org/Security/Server_Side_TLS#Nginx
        ssl_protocols TLSv1 TLSv1.1 TLSv1.2;
        ssl_ciphers 'ECDHE-ECDSA-AES256-GCM-SHA384:ECDHE-ECDSA-AES128-GCM-SHA256:ECDHE
-RSA-AES256-GCM-SHA384:ECDHE-RSA-AES128-GCM-SHA256:ECDHE-ECDSA-AES256-SHA384:ECDHE-ECD
SA-AES128-SHA256:ECDHE-RSA-AES256-SHA384:ECDHE-RSA-AES128-SHA256:ECDHE-RSA-AES256-SHA:
ECDHE-ECDSA-AES256-SHA:ECDHE-RSA-AES128-SHA:ECDHE-ECDSA-AES128-SHA:DHE-RSA-AES256-GCM-
SHA384:DHE-RSA-AES256-SHA256:DHE-RSA-AES256-SHA:DHE-RSA-CAMELLIA256-SHA:DHE-RSA-AES128
-GCM-SHA256:DHE-RSA-AES128-SHA256:DHE-RSA-AES128-SHA:DHE-RSA-SEED-SHA:DHE-RSA-CAMELLIA
128-SHA:HIGH:!aNULL:!eNULL:!LOW:!3DES:!MD5:!EXP:!PSK:!SRP:!DSS';
        ssl_prefer_server_ciphers on;

        proxy_set_header X-Forwarded-For $remote_addr;

        add_header Strict-Transport-Security "max-age=31536000; includeSubDomains";
        server_tokens off;

        location / {
            proxy_pass          http://127.0.0.1:8000;
            proxy_set_header    Host $host;
            proxy_set_header    X-Real-IP $remote_addr;
            proxy_set_header    X-Forwarded-For $proxy_add_x_forwarded_for;
            proxy_set_header    X-Forwarded-Host $server_name;
            proxy_set_header    X-Forwarded-Proto https;

            access_log       /var/log/nginx/seahub.access.log;
            error_log        /var/log/nginx/seahub.error.log;

            proxy_read_timeout  1200s;

            client_max_body_size 0;
        }
# If you are using [FastCGI](http://en.wikipedia.org/wiki/FastCGI),
# which is not recommended, you should use the following config for location `/`.
#
#    location / {
#        fastcgi_pass    127.0.0.1:8000;
#        fastcgi_param   SCRIPT_FILENAME     $document_root$fastcgi_script_name;
#        fastcgi_param   PATH_INFO           $fastcgi_script_name;
#
#        fastcgi_param    SERVER_PROTOCOL    $server_protocol;
#        fastcgi_param   QUERY_STRING        $query_string;
#        fastcgi_param   REQUEST_METHOD      $request_method;
```

```
#          fastcgi_param   CONTENT_TYPE        $content_type;
#          fastcgi_param   CONTENT_LENGTH      $content_length;
#          fastcgi_param    SERVER_ADDR          $server_addr;
#          fastcgi_param    SERVER_PORT          $server_port;
#          fastcgi_param    SERVER_NAME          $server_name;
#          fastcgi_param   REMOTE_ADDR         $remote_addr;
#           fastcgi_read_timeout 36000;
#
#          client_max_body_size 0;
#
#          access_log      /var/log/nginx/seahub.access.log;
#           error_log        /var/log/nginx/seahub.error.log;
#     }

        location /seafhttp {
            rewrite ^/seafhttp(.*)$ $1 break;
            proxy_pass http://127.0.0.1:8082;
            client_max_body_size 0;
            proxy_connect_timeout  36000s;
            proxy_read_timeout  36000s;
            proxy_send_timeout  36000s;
            send_timeout  36000s;
        }
        location /media {
            root /home/user/haiwen/seafile-server-latest/seahub;
        }
    }
```

Large file uploads

Tip for uploading very large files (> 4GB): By default Nginx will buffer large request body in temp file. After the body is completely received, Nginx will send the body to the upstream server (seaf-server in our case). But it seems when file size is very large, the buffering mechanism dosen't work well. It may stop proxying the body in the middle. So if you want to support file upload larger for 4GB, we suggest you install Nginx version >= 1.8.0 and add the following options to Nginx config file:

```
location /seafhttp {
    ... ...
    proxy_request_buffering off;
}
```

If you have WebDAV enabled it is recommended to add the same:

```
location /seafdav {
    ... ...
    proxy_request_buffering off;
}
```

Reload Nginx

```
nginx -s reload
```

Modify settings to use https

ccnet conf

Since you changed from http to https, you need to modify the value of `SERVICE_URL` in
ccnet.conf. You can also modify `SERVICE_URL` via web UI in "System Admin->Settings".
(**Warning**: If you set the value both via Web UI and ccnet.conf, the setting via Web UI will
take precedence.)

```
SERVICE_URL = https://seafile.example.com
```

seahub_settings.py

You need to add a line in seahub_settings.py to set the value of `FILE_SERVER_ROOT` . You can
also modify `FILE_SERVER_ROOT` via web UI in "System Admin->Settings". (**Warning**: If you set
the value both via Web UI and seahub_settings.py, the setting via Web UI will take
precedence.)

```
FILE_SERVER_ROOT = 'https://seafile.example.com/seafhttp'
```

Start Seafile and Seahub

```
./seafile.sh start
./seahub.sh start # or "./seahub.sh start-fastcgi" if you're using fastcgi
```

Additional modern settings for nginx (optional)

Activate IPv6

Require IPv6 on server otherwise the server will not start! Also the AAAA dns record is
required for IPv6 usage.

```
listen 443;
listen [::]:443;
```

Activate HTTP2

Activate HTTP2 for more performance. Only available for SSL and nginx version>=1.9.5. Simply add `http2` .

```
listen 443 http2;
listen [::]:443 http2;
```

Additional security settings for nginx (optional)

Add the HSTS header. If you already visited the https version the next time your browser will directly visit the https site and not the http one. Prevent man-in-the-middle-attacks:

```
add_header Strict-Transport-Security "max-age=31536000; includeSubDomains" always;
```

Disable exact server version in header. Prevent scans for vulnerable server. **This should be added to every server block, as it shall obfuscate the version of nginx.**

```
server_tokens off;
```

Config Seahub with Apache

Important

According to the security advisory published by Django team, we recommend disable GZip compression to mitigate BREACH attack.

This tutorial assumes you run at least Apache 2.4.

Prepare

Install and enable apache modules

On Ubuntu you can use:

```
sudo a2enmod rewrite
sudo a2enmod proxy_http
```

Deploy Seahub/FileServer With Apache

Seahub is the web interface of Seafile server. FileServer is used to handle raw file uploading/downloading through browsers. By default, it listens on port 8082 for HTTP request.

Here we deploy Seahub and FileServer with reverse proxy. We assume you are running Seahub using domain '"www.myseafile.com"'.

Modify Apache config file: (`sites-enabled/000-default`) for ubuntu/debian, (`vhost.conf`) for centos/fedora

```
<VirtualHost *:80>
    ServerName www.myseafile.com
    # Use "DocumentRoot /var/www/html" for Centos/Fedora
    # Use "DocumentRoot /var/www" for Ubuntu/Debian
    DocumentRoot /var/www
    Alias /media  /home/user/haiwen/seafile-server-latest/seahub/media

    RewriteEngine On

    <Location /media>
        Require all granted
    </Location>

    #
    # seafile fileserver
    #
    ProxyPass /seafhttp http://127.0.0.1:8082
    ProxyPassReverse /seafhttp http://127.0.0.1:8082
    RewriteRule ^/seafhttp - [QSA,L]

    #
    # seahub
    #
    SetEnvIf Authorization "(.*)" HTTP_AUTHORIZATION=$1
    ProxyPass / http://127.0.0.1:8000/
    ProxyPassReverse / http://127.0.0.1:8000/
</VirtualHost>
```

Modify ccnet.conf and seahub_setting.py

Modify ccnet.conf

You need to modify the value of `SERVICE_URL` in ccnet.conf to let Seafile know the domain you choose. You can also modify SERVICE_URL via web UI in "System Admin->Settings". (**Warning**: if you set the value both via Web UI and ccnet.conf, the setting via Web UI will take precedence.)

```
SERVICE_URL = http://www.myseafile.com
```

Note: If you later change the domain assigned to seahub, you also need to change the value of `SERVICE_URL` .

Modify seahub_settings.py

You need to add a line in `seahub_settings.py` to set the value of `FILE_SERVER_ROOT` . You can also modify `FILE_SERVER_ROOT` via web UI in "System Admin->Settings". (**Warning**: if you set the value both via Web UI and seahub_settings.py, the setting via Web UI will take

precedence.)

```
FILE_SERVER_ROOT = 'http://www.myseafile.com/seafhttp'
```

Start Seafile and Seahub

```
sudo service apache2 restart
./seafile.sh start
./seahub.sh start
```

Troubleshooting

Problems with paths and files containing spaces

If there are problems with paths or files containing spaces, make sure to have at least Apache 2.4.12.

References

- https://github.com/haiwen/seafile/issues/1258#issuecomment-188866740
- https://bugs.launchpad.net/ubuntu/+source/apache2/+bug/1284641
- https://bugs.launchpad.net/ubuntu/+source/apache2/+bug/1284641/comments/5
- https://svn.apache.org/viewvc/httpd/httpd/tags/2.4.12/CHANGES?view=markup#l45

Enabling Https with Apache

Here we suggest you use Let's Encrypt to get a certificate from a Certificate Authority (CA). If you use a paid ssl certificate from some authority, just skip the first step.

Generate SSL certificate

For users who use Let's Encrypt, you can obtain a valid certificate via Certbot ACME client

On Ubuntu systems, the Certbot team maintains a PPA. Once you add it to your list of repositories all you'll need to do is apt-get the following packages.

```
sudo apt-get update
sudo apt-get install software-properties-common
sudo add-apt-repository ppa:certbot/certbot
sudo apt-get update
sudo apt-get install python-certbot-apache
```

Certbot has a fairly solid beta-quality Apache plugin, which is supported on many platforms, and automates both obtaining and installing certs:

```
sudo certbot --apache
```

Running this command will get a certificate for you and have Certbot edit your Apache configuration automatically to serve it. If you're feeling more conservative and would like to make the changes to your Apache configuration by hand, you can use the certonly subcommand:

```
sudo certbot --apache certonly
```

To learn more about how to use Certbot you can read threir documentation.

> If you're using a custom CA to sign your SSL certificate, you have to enable certificate revocation list (CRL) in your certificate. Otherwise http syncing on Windows client may not work. See this thread for more information.

Enable https on Seahub

Assume you have configured Apache as Deploy Seafile with Apache. To use https, you need to enable mod_ssl

```
    sudo a2enmod ssl
```

On Windows, you have to add ssl module to httpd.conf

```
LoadModule ssl_module modules/mod_ssl.so
```

Then modify your Apache configuration file. Here is a sample:

```
<VirtualHost *:443>
  ServerName www.myseafile.com
  DocumentRoot /var/www

  SSLEngine On
  SSLCertificateFile /path/to/cacert.pem
  SSLCertificateKeyFile /path/to/privkey.pem

  Alias /media  /home/user/haiwen/seafile-server-latest/seahub/media

  <Location /media>
    Require all granted
  </Location>

  RewriteEngine On

  #
  # seafile fileserver
  #
  ProxyPass /seafhttp http://127.0.0.1:8082
  ProxyPassReverse /seafhttp http://127.0.0.1:8082
  RewriteRule ^/seafhttp - [QSA,L]

  #
  # seahub
  #
  SetEnvIf Authorization "(.*)" HTTP_AUTHORIZATION=$1
  ProxyPass / http://127.0.0.1:8000/
  ProxyPassReverse / http://127.0.0.1:8000/
</VirtualHost>
```

Modify settings to use https

ccnet conf

Since you change from http to https, you need to modify the value of "SERVICE_URL" in ccnet.conf. You can also modify SERVICE_URL via web UI in "System Admin->Settings". (**Warning**: if you set the value both via Web UI and ccnet.conf, the setting via Web UI will take precedence.)

```
SERVICE_URL = https://www.myseafile.com
```

seahub_settings.py

You need to add a line in seahub_settings.py to set the value of `FILE_SERVER_ROOT` . You can also modify `FILE_SERVER_ROOT` via web UI in "System Admin->Settings". (**Warning**: if you set the value both via Web UI and seahub_settings.py, the setting via Web UI will take precedence.)

```
FILE_SERVER_ROOT = 'https://www.myseafile.com/seafhttp'
```

Start Seafile and Seahub

```
./seafile.sh start
./seahub.sh start
```

Configure Seafile to use LDAP

Note: This documentation is for the Community Edition. If you're using Pro Edition, please refer to the Seafile Pro documentation.

How does LDAP User Management work in Seafile

When Seafile is integrated with LDAP/AD, users in the system can be divided into two tiers:

- Users within Seafile's internal user database. Some attributes are attached to these users, such as whether it's a system admin user, whether it's activated. This tier includes two types of users:
    - Native users: these users are created by the admin on Seafile's system admin interface. These users are stored in the `EmailUser` table of the `ccnet` database.
    - Users imported from LDAP/AD server: When a user in LDAP/AD logs into Seafile, its information will be imported from LDAP/AD server into Seafile's database. These users are stored in the `LDAPUsers` table of the `ccnet` database.
- Users in LDAP/AD server. These are all the intended users of Seafile inside the LDAP server. Seafile doesn't manipulate these users directly. It has to import them into its internal database before setting attributes on them.

When Seafile counts the number of users in the system, it only counts the **activated** users in its internal database.

When Seafile is integrated with LDAP/AD, it'll look up users from both the internal database and LDAP server. As long as the user exists in one of these two sources, they can log into the system.

Basic LDAP/AD Integration

The only requirement for Seafile to use LDAP/AD for authentication is that there must be a unique identifier for each user in the LDAP/AD server. Seafile can only use email-address-format user identifiers. So there are usually only two options for this unique identifier:

- Email address: this is the most common choice. Most organizations assign unique email address for each member.
- UserPrincipalName: this is a user attribute only available in Active Directory. It's format is `user-login-name@domain-name`, e.g. `john@example.com`. It's not a real email address, but it works fine as the unique identifier.

Connecting to Active Directory

To use AD to authenticate user, please add the following lines to ccnet.conf.

If you choose email address as unique identifier:

```
[LDAP]
HOST = ldap://192.168.1.123/
BASE = cn=users,dc=example,dc=com
USER_DN = administrator@example.local
PASSWORD = secret
LOGIN_ATTR = mail
```

If you choose UserPrincipalName as unique identifier:

```
[LDAP]
HOST = ldap://192.168.1.123/
BASE = cn=users,dc=example,dc=com
USER_DN = administrator@example.local
PASSWORD = secret
LOGIN_ATTR = userPrincipalName
```

Meaning of each config options:

- HOST: LDAP URL for the host. ldap://, ldaps:// and ldapi:// are supported. You can also include a port number in the URL, like ldap://ldap.example.com:389. To use TLS, you should configure the LDAP server to listen on LDAPS port and specify ldaps:// here. More details about TLS will be covered below.
- BASE: The root distinguished name (DN) to use when running queries against the directory server. **You cannot use the root DN (e.g. dc=example,dc=com) as BASE**.
- USER_DN: The distinguished name of the user that Seafile will use when connecting to the directory server. This user should have sufficient privilege to access all the nodes under BASE. It's recommended to use a user in the administrator group.
- PASSWORD: Password of the above user.
- LOGIN_ATTR: The attribute used for user's unique identifier. Use `mail` or `userPrincipalName`.

Tips for choosing BASE and USER_DN:

- To determine the BASE, you first have to navigate your organization hierachy on the domain controller GUI.
    - If you want to allow all users to use Seafile, you can use 'cn=users,dc=yourdomain,dc=com' as BASE (with proper adjustment for your own needs).
    - If you want to limit users to a certain OU (Organization Unit), you run `dsquery` command on the domain controller to find out the DN for this OU. For example, if the OU is 'staffs', you can run 'dsquery ou -name staff'. More information can be

found here.

- AD supports 'user@domain.name' format for the USER_DN option. For example you can use administrator@example.com for USER_DN. Sometime the domain controller doesn't recognize this format. You can still use `dsquery` command to find out user's DN. For example, if the user name is 'seafileuser', run `dsquery user -name seafileuser`. More information here.

Connecting to other LDAP servers

Please add the following options to ccnet.conf:

```
[LDAP]
HOST = ldap://192.168.1.123/
BASE = ou=users,dc=example,dc=com
USER_DN = cn=admin,dc=example,dc=com
PASSWORD = secret
LOGIN_ATTR = mail
```

The meaning of the options are the same as described in the previous section. With other LDAP servers, you can only use `mail` attribute as user's unique identifier.

Advanced LDAP/AD Integration Options

Multiple BASE

Multiple base DN is useful when your company has more than one OUs to use Seafile. You can specify a list of base DN in the "BASE" config. The DNs are separated by ";", e.g.
`ou=developers,dc=example,dc=com;ou=marketing,dc=example,dc=com`

Additional Search Filter

Search filter is very useful when you have a large organization but only a portion of people want to use Seafile. The filter can be given by setting "FILTER" config. The value of this option follows standard LDAP search filter syntax (https://msdn.microsoft.com/en-us/library/aa746475(v=vs.85).aspx).

The final filter used for searching for users is `(&($LOGIN_ATTR=*)($FILTER))`. `$LOGIN_ATTR` and `$FILTER` will be replaced by your option values.

For example, add the following line to LDAP config:

```
FILTER = memberOf=CN=group,CN=developers,DC=example,DC=com
```

The final search filter would be `(&(mail=*)`
`(memberOf=CN=group,CN=developers,DC=example,DC=com))`

Note that the case of attribute names in the above example is significant. The `memberOf`
attribute is only available in Active Directory.

Limiting Seafile Users to a Group in Active Directory

You can use the FILTER option to limit user scope to a certain AD group.

1. First, you should find out the DN for the group. Again, we'll use the `dsquery` command
   on the domain controller. For example, if group name is 'seafilegroup', run `dsquery`
   `group -name seafilegroup` .
2. Add the following line to LDAP config:

```
FILTER = memberOf={output of dsquery command}
```

Using TLS connection to LDAP/AD server

To use a TLS connection to the directory server, you should install a valid SSL certificate on
the directory server.

The current version of Seafile Linux server package is compiled on CentOS. We include the
ldap client library in the package to maintain compatibility with older Linux distributions. But
since different Linux distributions have different path or configuration for OpenSSL library,
sometimes Seafile is unable to connect to the directory server with TLS.

The ldap library (libldap) bundled in the Seafile package is of version 2.4. If your Linux
distribution is new enough (like CentOS 6, Debian 7 or Ubuntu 12.04 or above), you can use
system's libldap instead.

On Ubuntu 14.04 and Debian 7/8, moving the bundled ldap related libraries out of the library
path should make TLS connection work.

```
cd ${SEAFILE_INSTALLATION_DIR}/seafile-server-latest/seafile/lib
mkdir disabled_libs_use_local_ones_instead
mv liblber-2.4.so.2 libldap-2.4.so.2 libsasl2.so.2 libldap_r-2.4.so.2 disabled_libs_us
e_local_ones_instead/
```

On CentOS 6, you have to move the libnssutil library:

```
cd ${SEAFILE_INSTALLATION_DIR}/seafile-server-latest/seafile/lib
mkdir disabled_libs_use_local_ones_instead
mv libnssutil3.so disabled_libs_use_local_ones_instead/
```

This effectively removes the bundled libraries from the library search path. When the server starts, it'll instead find and use the system libraries (if they are installed). This change has to be repeated after each update of the Seafile installation.

Overview

[Shibboleth](#) is a widely used single sign on (SSO) protocol. Seafile server (Community Edition >= 4.1.0, Pro Edition >= 4.0.6) supports authentication via Shibboleth. It allows users from another organization to log in to Seafile without registering an account on the service provider.

In this documentation, we assume the reader is familiar with Shibboleth installation and configuration. For introduction to Shibboleth concepts, please refer to https://wiki.shibboleth.net/confluence/display/SHIB2/UnderstandingShibboleth .

Shibboleth Service Provider (SP) should be installed on the same server as the Seafile server. The official SP from https://shibboleth.net/ is implemented as an Apache module. The module handles all Shibboleth authentication details. Seafile server receives authentication information (username) from fastcgi. The username then can be used as login name for the user.

Seahub provides a special URL to handle Shibboleth login. The URL is `https://your-server/shib-login` . Only this URL needs to be configured under Shibboleth protection. All other URLs don't go through the Shibboleth module. The overall workflow for a user to login with Shibboleth is as follows:

1. In the Seafile login page, there is a separate "Shibboleth" login button. When the user clicks the button, she/he will be redirected to `https://your-server/shib-login` .
2. Since that URL is controlled by Shibboleth, the user will be redirected to IdP for login. After the user logs in, she/he will be redirected back to `https://your-server/shib-login` .
3. This time the Shibboleth module passes the request to Seahub. Seahub reads the user information from the request and brings the user to her/his home page.
4. All later access to Seahub will not pass through the Shibboleth module. Since Seahub keeps session information internally, the user doesn't need to login again until the session expires.

Since Shibboleth support requires Apache, if you want to use Nginx, you need two servers, one for non-Shibboleth access, another configured with Apache to allow Shibboleth login. In a cluster environment, you can configure your load balancer to direct traffic to different server according to URL. Only the URL `https://your-server/shib-login` needs to be directed to Apache.

The configuration includes 3 steps:

1. Install and configure Shibboleth Service Provider;
2. Configure Apache;
3. Configure Seahub.

Install and Configure Shibboleth Service Provider

Installation and configuration of Shibboleth is out of the scope of this documentation. Here are a few references:

- For RedHat and SUSE:
  https://wiki.shibboleth.net/confluence/display/SHIB2/NativeSPLinuxInstall
- For Ubuntu: http://bradleybeddoes.com/2011/08/12/installing-a-shibboleth-2-sp-in-ubuntu-11-04-within-virtualbox/

Please note that you don't have to follow the Apache configurations in the above links. Just use the Apache config we provide in the next section.

Apache Configuration

You should create a new virtual host configuration for Shibboleth.

Shibboleth Authentication

```
<IfModule mod_ssl.c>
    <VirtualHost _default_:443>
        ServerName seafile.example.com
        DocumentRoot /var/www
        #Alias /seafmedia  /home/ubuntu/dev/seahub/media
        Alias /media /home/user/seafile-server-latest/seahub/media

        ErrorLog ${APACHE_LOG_DIR}/seahub.error.log
        CustomLog ${APACHE_LOG_DIR}/seahub.access.log combined

        SSLEngine on
        SSLCertificateFile  /path/to/ssl-cert.pem
        SSLCertificateKeyFile /path/to/ssl-key.pem

        <Location /Shibboleth.sso>
        SetHandler shib
        </Location>

        <Location /api2>
        AuthType None
        Require all granted
        Allow from all
        satisfy any
        </Location>

        RewriteEngine On
        <Location /media>
        Require all granted
        </Location>

        <Location /shib-login>
        AuthType shibboleth
        ShibRequestSetting requireSession true
        Require valid-user
        </Location>

        #
        # seafile fileserver
        #
        ProxyPass /seafhttp http://127.0.0.1:8082
        ProxyPassReverse /seafhttp http://127.0.0.1:8082
        RewriteRule ^/seafhttp - [QSA,L]

        #
        # seahub
        #
        RewriteRule ^/(media.*)$ /$1 [QSA,L,PT]
        RewriteCond %{REQUEST_FILENAME} !-f
        RewriteCond %{REQUEST_URI} !^/Shibboleth.sso
        RewriteRule ^(.*)$ /seahub.fcgi$1 [QSA,L,E=HTTP_AUTHORIZATION:%{HTTP:Authoriza
tion}]

    </VirtualHost>
</IfModule>
```

After restarting Apache, you should be able to get the Service Provider metadata by accessing https://seafile.example.com/Shibboleth.sso/Metadata . This metadata should be uploaded to the Identity Provider (IdP) server.

Configure Seahub

Seahub extracts the username from the `REMOTE_USER` environment variable. So you should modify your SP's shibboleth2.xml (/etc/shibboleth/shibboleth2.xml on Ubuntu) config file, so that Shibboleth translates your desired attribute into `REMOTE_USER` environment variable.

```
<ApplicationDefaults entityID="https://your-server/shibboleth"
    REMOTE_USER="xxxx">
```

In Seafile, only one of the following two attributes can be used for username: `eppn` , and `mail` . `eppn` stands for "Edu Person Principal Name". It is usually the UserPrincipalName attribute in Active Directory. It's not necessarily a valid email address. `mail` is the user's email address. You should set `REMOTE_USER` to either one of these attributes.

Now we have to tell Seahub how to do with the authentication information passed in by Shibboleth.

Add the following configuration to seahub_settings.py.

```
EXTRA_AUTHENTICATION_BACKENDS = (
    'shibboleth.backends.ShibbolethRemoteUserBackend',
)
EXTRA_MIDDLEWARE_CLASSES = (
    'shibboleth.middleware.ShibbolethRemoteUserMiddleware',
)

ENABLE_SHIB_LOGIN = True

SHIBBOLETH_ATTRIBUTE_MAP = {
    # Change eppn to mail if you use mail attribute for REMOTE_USER
    "eppn": (False, "username"),
}
```

Since version 5.0, Seahub can process additional user attributes from Shibboleth. These attributes are saved into Seahub's database, as user's properties. They're all not mandatory. The internal user properties Seahub now supports are:

- givenname
- surname
- contact_email: used for sending notification email to user if username is not a valid email address (like eppn).
- institution: used to identify user's institution

You can specify the mapping between Shibboleth attributes and Seahub's user properties in seahub_settings.py:

```
SHIBBOLETH_ATTRIBUTE_MAP = {
    "eppn": (False, "username"),
    "givenname": (False, "givenname"),
    "sn": (False, "surname"),
    "mail": (False, "contact_email"),
    "organization": (False, "institution"),
}
```

In the above config, the hash key is Shibboleth attribute name, the second element in the hash value is Seahub's property name. You can adjust the Shibboleth attribute name for your own needs. *Note that you may have to change attribute-map.xml in your Shibboleth SP, so that the desired attributes are passed to Seahub. And you have to make sure the IdP sends these attributes to the SP.*

Since version 5.1.1, we added an option `SHIB_ACTIVATE_AFTER_CREATION` (defaults to `True`) which control the user status after shibboleth connection. If this option set to `False` , user will be inactive after connection, and system admins will be notified by email to activate that account.

Affiliation and user role

Shibboleth has a field called affiliation. It is a list like: `employee@uni-mainz.de;member@uni-mainz.de;faculty@uni-mainz.de;staff@uni-mainz.de.`

Since version 6.0.7 pro, we are able to set user role from Shibboleth. Details about user role, please refer to https://manual.seafile.com/deploy_pro/roles_permissions.html

To enable this, modify `SHIBBOLETH_ATTRIBUTE_MAP` above and add `Shibboleth-affiliation` field, you may need to change `Shibboleth-affiliation` according to your Shibboleth SP attributes.

```
SHIBBOLETH_ATTRIBUTE_MAP = {
    "eppn": (False, "username"),
    "givenname": (False, "givenname"),
    "sn": (False, "surname"),
    "mail": (False, "contact_email"),
    "organization": (False, "institution"),
    "Shibboleth-affiliation": (False, "affiliation"),
}
```

Then add new config to define affiliation role map,

```
SHIBBOLETH_AFFILIATION_ROLE_MAP = {
    'employee@uni-mainz.de': 'staff',
    'member@uni-mainz.de': 'staff',
    'student@uni-mainz.de': 'student',
    'employee@hu-berlin.de': 'guest',
    # Since 6.1.7 pro, we support wildcards matching.
    'patterns': (
        ('*@hu-berlin.de', 'guest1'),
        ('*@*.de', 'guest2'),
        ('*', 'guest'),
    ),
}
```

After Shibboleth login, Seafile should calcualte user's role from affiliation and SHIBBOLETH_AFFILIATION_ROLE_MAP.

Verify

After restarting Apache and Seafile services, you can then test the shibboleth login workflow.

Configure Seafile to Use Syslog

Since community edition 5.1.2 and professional edition 5.1.4, Seafile support using Syslog.

Configure Syslog for Seafile Controller and Server

Add following configuration to `general` section in `seafile.conf` :

```
[general]
enable_syslog = true
```

Restart seafile server, you will find follow logs in `/var/log/syslog` :

```
May 10 23:45:19 ubuntu seafile-controller[16385]: seafile-controller.c(154): starting
ccnet-server ...
May 10 23:45:19 ubuntu seafile-controller[16385]: seafile-controller.c(73): spawn_proc
ess: ccnet-server -F /home/plt/haiwen/conf -c /home/plt/haiwen/ccnet -f /home/plt/haiw
en/logs/ccnet.log -d -P /home/plt/haiwen/pids/ccnet.pid
```

```
May 12 01:00:51 ubuntu seaf-server[21552]: ../common/mq-mgr.c(60): [mq client] mq cile
nt is started
May 12 01:00:51 ubuntu seaf-server[21552]: ../common/mq-mgr.c(106): [mq mgr] publish t
o hearbeat mq: seaf_server.heartbeat
```

Configure Syslog For Seafevents (Professional Edition only)

Add following configuration to `seafevents.conf` :

```
[Syslog]
enabled = true
```

Restart seafile server, you will find follow logs in `/var/log/syslog`

```
May 12 01:00:52 ubuntu seafevents[21542]: [seafevents] database: mysql, name: seahub-p
ro
May 12 01:00:52 ubuntu seafevents[21542]: seafes enabled: True
May 12 01:00:52 ubuntu seafevents[21542]: seafes dir: /home/plt/pro-haiwen/seafile-pro
-server-5.1.4/pro/python/seafes
```

Configure Syslog For Seahub

Syslog Integration

Add following configurations to `seahub_settings.py` :

```python
LOGGING = {
    'version': 1,
    'disable_existing_loggers': True,
    'formatters': {
        'verbose': {
            'format': '%(process)-5d %(thread)d %(name)-50s %(levelname)-8s %(message)s'
        },
        'standard': {
            'format': '%(asctime)s [%(levelname)s] %(name)s:%(lineno)s %(funcName)s %(message)s'
        },
        'simple': {
            'format': '[%(asctime)s] %(name)s %(levelname)s %(message)s',
            'datefmt': '%d/%b/%Y %H:%M:%S'
        },
    },
    'filters': {
        'require_debug_false': {
            '()': 'django.utils.log.RequireDebugFalse',
        },
        'require_debug_true': {
            '()': 'django.utils.log.RequireDebugTrue',
        },
    },
    'handlers': {
        'console': {
            'filters': ['require_debug_true'],
            'class': 'logging.StreamHandler',
            'formatter': 'simple'
        },
        'syslog': {
            'class': 'logging.handlers.SysLogHandler',
            'address': '/dev/log',
            'formatter': 'standard'
        },
    },
    'loggers': {
        # root logger
        # All logs printed by Seahub and any third party libraries will be handled by
this logger.
        '': {
            'handlers': ['console', 'syslog'],
            'level': 'INFO', # Logs when log level is higher than info. Level can be any one of DEBUG, INFO, WARNING, ERROR, CRITICAL.
            'disabled': False
        },
        # This logger recorded logs printed by Django Framework. For example, when you
 see 5xx page error, you should check the logs recorded by this logger.
        'django.request': {
            'handlers': ['console', 'syslog'],
            'level': 'INFO',
            'propagate': False,
```

```
            },
        },
    }
```

Integrate Seafile with Collabora Online (LibreOffice Online)

Since Seafile Professional edition 6.0.0, you can integrate Seafile with Collabora Online to preview office files.

Setup LibreOffice Online

1. Prepare an Ubuntu 16.04 64bit server with docker installed;

2. Assign a domain name to this server, we use *collabora-online.seafile.com* here.

3. Obtain and install valid TLS/SSL certificates for this server, we use Let's Encrypt.

4. Use Nginx to serve collabora online, config file example:

```
server {
 listen       443 ssl;
 server_name  collabora-online.seafile.com;

 ssl_certificate /etc/letsencrypt/live/collabora-online.seafile.com/fullchain.pem;
 ssl_certificate_key /etc/letsencrypt/live/collabora-online.seafile.com/privkey.pem;

 # static files
 location ^~ /loleaflet {
     proxy_pass https://localhost:9980;
     proxy_set_header Host $http_host;
 }

 # WOPI discovery URL
 location ^~ /hosting/discovery {
     proxy_pass https://localhost:9980;
     proxy_set_header Host $http_host;
 }

 # websockets, download, presentation and image upload
 location ^~ /lool {
     proxy_pass https://localhost:9980;
     proxy_set_header Upgrade $http_upgrade;
     proxy_set_header Connection "upgrade";
     proxy_set_header Host $http_host;
 }
}
```

5. then use the following command to setup/start Collabora Online:

```
docker pull collabora/code
docker run -t -p 9980:9980 -e "domain=<your-dot-escaped-domain>" --restart always
--cap-add MKNOD collabora/code
```

NOTE: the `domain` args is the domain name of your Seafile server, if your Seafile server's domain name is *demo.seafile.com*, the command should be:

```
docker run -t -p 9980:9980 -e "domain=demo\.seafile\.com" --restart always --cap-a
dd MKNOD collabora/code
```

For more information about Collabora Online and how to deploy it, please refer to https://www.collaboraoffice.com

Config Seafile

NOTE: You must enable https with valid TLS/SSL certificates (we use Let's Encrypt) to Seafile to use Collabora Online.

Add following config option to seahub_settings.py:

LibreOffice Online Integration

```
# From 6.1.0 CE version on, Seafile support viewing/editing **doc**, **ppt**, **xls**
files via LibreOffice
# Add this setting to view/edit **doc**, **ppt**, **xls** files
OFFICE_SERVER_TYPE = 'CollaboraOffice'


# Enable LibreOffice Online
ENABLE_OFFICE_WEB_APP = True


# Url of LibreOffice Online's discovery page
# The discovery page tells Seafile how to interact with LibreOffice Online when view f
ile online
# You should change `https://collabora-online.seafile.com/hosting/discovery` to your a
ctual LibreOffice Online server address
OFFICE_WEB_APP_BASE_URL = 'https://collabora-online.seafile.com/hosting/discovery'


# Expiration of WOPI access token
# WOPI access token is a string used by Seafile to determine the file's
# identity and permissions when use LibreOffice Online view it online
# And for security reason, this token should expire after a set time period
WOPI_ACCESS_TOKEN_EXPIRATION = 30 * 60   # seconds


# List of file formats that you want to view through LibreOffice Online
# You can change this value according to your preferences
# And of course you should make sure your LibreOffice Online supports to preview
# the files with the specified extensions
OFFICE_WEB_APP_FILE_EXTENSION = ('odp', 'ods', 'odt', 'xls', 'xlsb', 'xlsm', 'xlsx','p
psx', 'ppt', 'pptm', 'pptx', 'doc', 'docm', 'docx')


# Enable edit files through LibreOffice Online
ENABLE_OFFICE_WEB_APP_EDIT = True


# types of files should be editable through LibreOffice Online
OFFICE_WEB_APP_EDIT_FILE_EXTENSION = ('odp', 'ods', 'odt', 'xls', 'xlsb', 'xlsm', 'xls
x','ppsx', 'ppt', 'pptm', 'pptx', 'doc', 'docm', 'docx')
```

Then restart Seafile.

Click an office file in Seafile web interface, you will see the online preview rendered by LibreOffice online. Here is an example:

	A	B	C	D	E	F	G	H	I	J	K
1	1	2	3	4	5	6	7	8			
2			51	1900	37						
3	a	130	39	1600	41						
4			23	1300	57	265		75			
5	a	125	51	2000	39						
6	a		39	1600	41						
7	a	110	51	2295	45						
8	a	100	51	1900	37						
9	a	100	51	1900	37						
10	a	90	39	1300	33						
11	a	90	51	1800	35						
12	a		23	1000	43						
13	a	90	51	1800	35						
14	a		23	1000	43	95	20				
15	a	80	51	1600	31						
16	a		23	1000	43						
17	a	80	39	1300	33						
18	a	50	39	1000	26						
19	a	106	39	1300	33						

-----车费-----

Trouble shooting

Understanding how theintegration work will help you debug the problem. When a user visits a file page:

1. (seahub->browser) Seahub will generate a page containing an iframe and send it to the browser
2. (browser->LibreOffice Online) With the iframe, the browser will try to load the file preview page from the LibreOffice Online
3. (LibreOffice Online->seahub) LibreOffice Online receives the request and sends a request to Seahub to get the file content
4. (LibreOffice Online->browser) LibreOffice Online sends the file preview page to the browser.

If you have a problem, please check the Nginx log for Seahub (for step 3) and Collabora Online to see which step is wrong.

OnlyOffice

From version 6.1.0+ on (including CE), Seafile supports OnlyOffice to view/edit office files online. In order to use OnlyOffice, you must first deploy an OnlyOffice server.

Info for clusters

In a cluster setup we recommend a dedicated DocumentServer host or a DocumentServer Cluster on a different subdomain. Technically it works also via subfolder if the loadbalancer can handle folder for loadbalancing.

For most users we recommend to deploy the documentserver in a docker image locally and provide it via a subfolder.

Benefits:

- no additional server required
- no additional subdomain required
- no additional SSL certificate required
- easy and quick deployment
- easy management

Summary

- Deployment of DocumentServer via SUBDOMAIN
    - Test that DocumentServer is running
    - Configure Seafile Server
- Deployment of DocumentServer via SUBFOLDER
    - Install Docker
    - Deploy OnlyOffice DocumentServer Docker image
    - Configure Webserver
    - Test that DocumentServer is running
    - Configure Seafile Server
    - Complete Nginx config EXAMPLE
    - Complete Apache config EXAMPLE

Deployment of DocumentServer via SUBDOMAIN

URL example: https://onlyoffice.domain.com

- Subdomain
- DNS record for subdomain

- SSL certificate (LE works also)

For a quick and easy installation, we suggest you use ONLYOFFICE/Docker-DocumentServer for a subdomain installation. Just follow the guide in the OnlyOffice documentation.

Test that DocumentServer is running via SUBDOMAIN

After the installation process is finished, visit this page to make sure you have deployed OnlyOffice successfully: `http{s}://{your Seafile Server's domain or IP}/welcome` , you will get **Document Server is running** info at this page.

Configure Seafile Server for SUBDOMAIN

Add the following config option to `seahub_settings.py` .

```
# Enable Only Office
ENABLE_ONLYOFFICE = True
VERIFY_ONLYOFFICE_CERTIFICATE = False
ONLYOFFICE_APIJS_URL = 'http{s}://{your OnlyOffice server's domain or IP}/web-apps/app
s/api/documents/api.js'
ONLYOFFICE_FILE_EXTENSION = ('doc', 'docx', 'ppt', 'pptx', 'xls', 'xlsx', 'odt', 'fodt
', 'odp', 'fodp', 'ods', 'fods')
ONLYOFFICE_EDIT_FILE_EXTENSION = ('docx', 'pptx', 'xlsx')
```

Then restart the Seafile Server

```
./seafile.sh restart
./seahub.sh restart

# or
service seafile-server restart
```

When you click on a document you should see the new preview page.

Deployment of DocumentServer via SUBFOLDER

URL example: https://seafile.domain.com/onlyofficeds

- Local proxy to subfolder on already existing Seafile Server (sub)domain.
- SSL via Seafile Server domain, no additional certificate required !

Do NOT CHANGE the SUBFOLDER if not absolutely required for some reason!

The subfolder page is only important for communication between Seafile and the DocumentServer, there is nothing except the welcome page (e.g. no overview or settings). Users will need access to it though for the OnlyOffice document server editor to work properly.

`/onlyoffice/` **cannot be used as subfolder as this path is used for communication between Seafile and Document Server !**

The following guide shows how to deploy the OnlyOffice Document server locally. *It is based on the "ONLYOFFICE/Docker-DocumentServer" documentation.*

Requirements for OnlyOffice DocumentServer via Docker

https://github.com/ONLYOFFICE/Docker-DocumentServer#recommended-system-requirements

Install Docker

Ubuntu, Debian, CentOS

Deploy OnlyOffice DocumentServer Docker image

This downloads and deploys the DocumentServer on the local port 88.

Debian 8

```
docker run -i -t -d -p 88:80 --restart=always --name oods onlyoffice/documentserver
```

Ubuntu 16.04

```
docker run -dit -p 88:80 --restart always --name oods onlyoffice/documentserver
```

Nothing yet confirmed on CentOS 7, you may try any of the above commands, they may work also.

EXAMPLE: Debian Docker container with MEMORY LIMITS

In Debian 8 you first have to change some settings in the grub config to support memory limits for docker.

```
# Edit /etc/default/grub
# Add the following options
GRUB_CMDLINE_LINUX_DEFAULT="cgroup_enable=memory swapaccount=1"

# Update Grub2 and reboot
update-grub2 && reboot
```

Now you can start the docker image with memory limits.

```
docker run -i -t -d -p 88:80 --restart=always --memory "6g" --memory-swap="6g" --name oods
onlyoffice/documentserver
```

These limits are above the minimum recommendation (4G RAM/2GB SWAP) so the DocumentServer's performance keeps up, while multiple users edit documents. Docker SWAP works different from machine SWAP, check the docker documentation.

Docker documentation

If you have any issues please check the docker documentation.

Auto-starting the docker image.

If you wish to limit the resources that docker uses check the docker documentation.

Configure Webserver

Configure Nginx

Variable mapping

Add the following configuration to your seafile nginx .conf file (e.g. `/etc/ngnix/conf.d/seafile.conf`) out of the `server` directive. These variables are to be defined for the DocumentServer to work in a subfolder.

```
# Required for only office document server
map $http_x_forwarded_proto $the_scheme {
        default $http_x_forwarded_proto;
        "" $scheme;
    }

map $http_x_forwarded_host $the_host {
        default $http_x_forwarded_host;
        "" $host;
    }

map $http_upgrade $proxy_connection {
        default upgrade;
        "" close;
    }
```

Proxy server settings subfolder

Add the following configuration to your seafile nginx .conf file (e.g. `/etc/ngnix/conf.d/seafile.conf`) within the `server` directive.

```
...
location /onlyofficeds/ {

        # THIS ONE IS IMPORTANT ! - Trailing slash !
        proxy_pass http://{your Seafile server's domain or IP}:88/;

        proxy_http_version 1.1;
        client_max_body_size 100M; # Limit Document size to 100MB
        proxy_read_timeout 3600s;
        proxy_connect_timeout 3600s;
        proxy_set_header Upgrade $http_upgrade;
        proxy_set_header Connection $proxy_connection;

        # THIS ONE IS IMPORTANT ! - Subfolder and NO trailing slash !
        proxy_set_header X-Forwarded-Host $the_host/onlyofficeds;

        proxy_set_header X-Forwarded-Proto $the_scheme;
        proxy_set_header X-Forwarded-For $proxy_add_x_forwarded_for;
    }
...
```

Configure Apache

BETA - Requires further testing!

Add the following configuration to your seafile apache config file (e.g. `sites-enabled/seafile.conf`) **outside** the `<VirtualHost >` directive.

```
...

LoadModule authn_core_module modules/mod_authn_core.so
LoadModule authz_core_module modules/mod_authz_core.so
LoadModule unixd_module modules/mod_unixd.so
LoadModule proxy_module modules/mod_proxy.so
LoadModule proxy_http_module modules/mod_proxy_http.so
LoadModule proxy_wstunnel_module modules/mod_proxy_wstunnel.so
LoadModule headers_module modules/mod_headers.so
LoadModule setenvif_module modules/mod_setenvif.so

<IfModule unixd_module>
  User daemon
  Group daemon
</IfModule>

...
```

Add the following configuration to your seafile apache config file (e.g. `sites-enabled/seafile.conf`) **inside** the `<VirtualHost >` directive at the end.

```
...

Define VPATH /onlyofficeds
Define DS_ADDRESS {your Seafile server's domain or IP}:88

...

<Location ${VPATH}>
  Require all granted
  SetEnvIf Host "^(.*)$" THE_HOST=$1
  RequestHeader setifempty X-Forwarded-Proto http
  RequestHeader setifempty X-Forwarded-Host %{THE_HOST}e
  RequestHeader edit X-Forwarded-Host (.*) $1${VPATH}
  ProxyAddHeaders Off
  ProxyPass "http://${DS_ADDRESS}/"
  ProxyPassReverse "http://${DS_ADDRESS}/"
</Location>

...
```

Test that DocumentServer is running via SUBFOLDER

After the installation process is finished, visit this page to make sure you have deployed OnlyOffice successfully: `http{s}://{your Seafile Server's domain or IP}/{your subdolder}/welcome` , you will get **Document Server is running** info at this page.

Configure Seafile Server for SUBFOLDER

Add the following config option to `seahub_settings.py` :

```
# Enable Only Office
ENABLE_ONLYOFFICE = True
VERIFY_ONLYOFFICE_CERTIFICATE = True
ONLYOFFICE_APIJS_URL = 'http{s}://{your Seafile server's domain or IP}/{your subdolder
}/web-apps/apps/api/documents/api.js'
ONLYOFFICE_FILE_EXTENSION = ('doc', 'docx', 'ppt', 'pptx', 'xls', 'xlsx', 'odt', 'fodt
', 'odp', 'fodp', 'ods', 'fods')
ONLYOFFICE_EDIT_FILE_EXTENSION = ('docx', 'pptx', 'xlsx')
```

Then restart the Seafile Server

```
./seafile.sh restart
./seahub.sh restart

# or
service seafile-server restart
```

When you click on a document you should see the new preview page.

Complete Nginx config EXAMPLE

Complete nginx config file (e.g. `/etc/nginx/conf.d/seafile.conf`) based on Seafile Server V6.1 including OnlyOffice DocumentServer via subfolder.

```
# Required for OnlyOffice DocumentServer
map $http_x_forwarded_proto $the_scheme {
    default $http_x_forwarded_proto;
    "" $scheme;
}

map $http_x_forwarded_host $the_host {
    default $http_x_forwarded_host;
    "" $host;
}

map $http_upgrade $proxy_connection {
    default upgrade;
    "" close;
}

server {
        listen       80;
        server_name  seafile.domain.com;
        rewrite ^ https://$http_host$request_uri? permanent;    # force redirect http
to https
        server_tokens off;
}

server {
        listen 443 http2;
        ssl on;
        ssl_certificate /etc/ssl/cacert.pem;        # path to your cacert.pem
        ssl_certificate_key /etc/ssl/privkey.pem;    # path to your privkey.pem
        server_name seafile.domain.com;
        proxy_set_header X-Forwarded-For $remote_addr;
        add_header Strict-Transport-Security "max-age=31536000; includeSubDomains";
        server_tokens off;

    #
    # seahub
    #
    location / {
        fastcgi_pass    127.0.0.1:8000;
        fastcgi_param   SCRIPT_FILENAME     $document_root$fastcgi_script_name;
        fastcgi_param   PATH_INFO           $fastcgi_script_name;

        fastcgi_param   SERVER_PROTOCOL      $server_protocol;
        fastcgi_param   QUERY_STRING        $query_string;
        fastcgi_param   REQUEST_METHOD      $request_method;
        fastcgi_param   CONTENT_TYPE        $content_type;
        fastcgi_param   CONTENT_LENGTH      $content_length;
        fastcgi_param   SERVER_ADDR         $server_addr;
        fastcgi_param   SERVER_PORT         $server_port;
```

```
        fastcgi_param   SERVER_NAME         $server_name;
        fastcgi_param   REMOTE_ADDR         $remote_addr;
        fastcgi_param   HTTPS               on;
        fastcgi_param   HTTP_SCHEME         https;

        access_log      /var/log/nginx/seahub.access.log;
        error_log       /var/log/nginx/seahub.error.log;
        fastcgi_read_timeout 36000;
        client_max_body_size 0;
    }

    #
    # seafile
    #
    location /seafhttp {
        rewrite ^/seafhttp(.*)$ $1 break;
        proxy_pass http://127.0.0.1:8082;
        client_max_body_size 0;
        proxy_connect_timeout  36000s;
        proxy_read_timeout  36000s;
        proxy_send_timeout  36000s;
        send_timeout  36000s;
    }

    location /media {
        root /home/user/haiwen/seafile-server-latest/seahub;
    }

    #
    # seafdav (webdav)
    #
    location /seafdav {
        fastcgi_pass    127.0.0.1:8080;
        fastcgi_param   SCRIPT_FILENAME     $document_root$fastcgi_script_name;
        fastcgi_param   PATH_INFO           $fastcgi_script_name;
        fastcgi_param   SERVER_PROTOCOL     $server_protocol;
        fastcgi_param   QUERY_STRING        $query_string;
        fastcgi_param   REQUEST_METHOD      $request_method;
        fastcgi_param   CONTENT_TYPE        $content_type;
        fastcgi_param   CONTENT_LENGTH      $content_length;
        fastcgi_param   SERVER_ADDR         $server_addr;
        fastcgi_param   SERVER_PORT         $server_port;
        fastcgi_param   SERVER_NAME         $server_name;
        fastcgi_param   HTTPS               on;
        client_max_body_size 0;
        access_log      /var/log/nginx/seafdav.access.log;
        error_log       /var/log/nginx/seafdav.error.log;
    }

    #
    # onlyofficeds
    #
    location /onlyofficeds/ {
        # IMPORTANT ! - Trailing slash !
        proxy_pass http://127.0.0.1:88/;
```

```
        proxy_http_version 1.1;
        client_max_body_size 100M; # Limit Document size to 100MB
        proxy_read_timeout 3600s;
        proxy_connect_timeout 3600s;
        proxy_set_header Upgrade $http_upgrade;
        proxy_set_header Connection $proxy_connection;

        # IMPORTANT ! - Subfolder and NO trailing slash !
        proxy_set_header X-Forwarded-Host $the_host/onlyofficeds;

        proxy_set_header X-Forwarded-Proto $the_scheme;
        proxy_set_header X-Forwarded-For $proxy_add_x_forwarded_for;
    }
}
```

Complete Apache config EXAMPLE

BETA - Requires further testing!

```
LoadModule authn_core_module modules/mod_authn_core.so
LoadModule authz_core_module modules/mod_authz_core.so
LoadModule unixd_module modules/mod_unixd.so
LoadModule proxy_module modules/mod_proxy.so
LoadModule proxy_http_module modules/mod_proxy_http.so
LoadModule proxy_wstunnel_module modules/mod_proxy_wstunnel.so
LoadModule headers_module modules/mod_headers.so
LoadModule setenvif_module modules/mod_setenvif.so
LoadModule ssl_module modules/mod_ssl.so

<IfModule unixd_module>
  User daemon
  Group daemon
</IfModule>

<VirtualHost *:80>
    ServerName seafile.domain.com
    ServerAlias domain.com
    Redirect permanent / https://seafile.domain.com
</VirtualHost>

<VirtualHost *:443>
  ServerName seafile.domain.com
  DocumentRoot /var/www

  SSLEngine On
  SSLCertificateFile /etc/ssl/cacert.pem
  SSLCertificateKeyFile /etc/ssl/privkey.pem

  ## Strong SSL Security
  ## https://raymii.org/s/tutorials/Strong_SSL_Security_On_Apache2.html

  SSLCipherSuite EECDH+AESGCM:EDH+AESGCM:AES256+EECDH:ECDHE-RSA-AES128-SHA:DHE-RSA-AES
128-GCM-SHA256:AES256+EDH:ECDHE-RSA-AES256-GCM-SHA384:ECDHE-RSA-AES128-GCM-SHA256:DHE-
RSA-AES256-GCM-SHA384:ECDHE-RSA-AES256-SHA384:ECDHE-RSA-AES128-SHA256:ECDHE-RSA-AES256
```

```
-SHA:DHE-RSA-AES256-SHA256:DHE-RSA-AES128-SHA256:DHE-RSA-AES256-SHA:DHE-RSA-AES128-SHA
:ECDHE-RSA-DES-CBC3-SHA:EDH-RSA-DES-CBC3-SHA:AES256-GCM-SHA384:AES128-GCM-SHA256:AES25
6-SHA256:AES128-SHA256:AES256-SHA:AES128-SHA:DES-CBC3-SHA:HIGH:!aNULL:!eNULL:!EXPORT:!
DES:!MD5:!PSK:!RC4
  SSLProtocol All -SSLv2 -SSLv3
  SSLCompression off
  SSLHonorCipherOrder on

  Alias /media   /home/user/haiwen/seafile-server-latest/seahub/media

  <Location /media>
    Require all granted
  </Location>

  RewriteEngine On

  #
  # seafile fileserver
  #
  ProxyPass /seafhttp http://127.0.0.1:8082
  ProxyPassReverse /seafhttp http://127.0.0.1:8082
  RewriteRule ^/seafhttp - [QSA,L]

  #
  # seahub
  #
  SetEnvIf Request_URI . proxy-fcgi-pathinfo=unescape
  SetEnvIf Authorization "(.*)" HTTP_AUTHORIZATION=$1
  ProxyPass / fcgi://127.0.0.1:8000/

  #
  # onlyofficeds
  #
  Define VPATH /onlyofficeds
  Define DS_ADDRESS {your Seafile server's domain or IP}:88

  <Location ${VPATH}>
  Require all granted
  SetEnvIf Host "^(.*)$" THE_HOST=$1
  RequestHeader setifempty X-Forwarded-Proto http
  RequestHeader setifempty X-Forwarded-Host %{THE_HOST}e
  RequestHeader edit X-Forwarded-Host (.*) $1${VPATH}
  ProxyAddHeaders Off
  ProxyPass "http://${DS_ADDRESS}/"
  ProxyPassReverse "http://${DS_ADDRESS}/"
  </Location>

</VirtualHost>
```

Upgrade manual

This page is for users who use the pre-compiled seafile server package.

- If you build seafile server from source, please read the **Upgrading Seafile Server** section on that page, instead of this one.
- After upgrading, you may need to clean seahub cache if it doesn't behave as expect.
- If you are running a **cluster**, please read upgrade a Seafile cluster.

Upgrade notes

Please check the upgrade notes for any special configuration or changes before/while upgrading.

Major version upgrade (like from 4.x.x to 5.y.y)

Suppose you are using version 4.3.0 and like to upgrade to version 5.0.0. First download and extract the new version. You should have a directory layout similar to this:

```
haiwen
   -- seafile-server-4.3.0
   -- seafile-server-5.0.0
   -- ccnet
   -- seafile-data
```

Now upgrade to version 5.0.0.

1. Shutdown Seafile server if it's running

   ```
   cd haiwen/seafile-server-4.3.0
   ./seahub.sh stop
   ./seafile.sh stop
   # or via service
   /etc/init.d/seafile-server stop
   ```

2. Check the upgrade scripts in seafile-server-5.0.0 directory.

   ```
   cd haiwen/seafile-server-5.0.0
   ls upgrade/upgrade_*
   ```

You will get a list of upgrade files:

```
...
upgrade/upgrade_4.0_4.1.sh
upgrade/upgrade_4.1_4.2.sh
upgrade/upgrade_4.2_4.3.sh
upgrade/upgrade_4.3_4.4.sh
upgrade/upgrade_4.4_5.0.sh
```

3. Start from your current version, run the script(s one by one)

```
upgrade/upgrade_4.3_4.4.sh
upgrade/upgrade_4.4_5.0.sh
```

4. Start the new server version as for any upgrade

```
cd haiwen/seafile-server-5.0.0/
./seafile.sh start
./seahub.sh start # or "./seahub.sh start-fastcgi" if you're using fastcgi
# or via service
/etc/init.d/seafile-server start
```

5. If the new version works fine, the old version can be removed

```
rm -rf seafile-server-4.3.0/
```

or alternatively be moved to the directory installed (in case you set it up)

```
mv seafile-server-4.3.0/ installed/
```

Minor version upgrade (like from 5.0.x to 5.1.y)

Suppose you are using version 5.0.0 and like to upgrade to version 5.1.0. First download and extract the new version. You should have a directory layout similar to this:

```
haiwen
   -- seafile-server-5.0.0
   -- seafile-server-5.1.0
   -- ccnet
   -- seafile-data
```

Now upgrade to version 5.1.0.

1. Shutdown Seafile server if it's running

```
cd haiwen/seafile-server-5.0.0
./seahub.sh stop
./seafile.sh stop
# or via service
/etc/init.d/seafile-server stop
```

2. Check the upgrade scripts in seafile-server-5.1.0 directory.

```
cd haiwen/seafile-server-5.1.0
ls upgrade/upgrade_*
```

You will get a list of upgrade files:

```
...
upgrade/upgrade_4.0_4.1.sh
upgrade/upgrade_4.1_4.2.sh
upgrade/upgrade_4.2_4.3.sh
upgrade/upgrade_4.3_4.4.sh
upgrade/upgrade_4.4_5.0.sh
upgrade/upgrade_5.0_5.1.sh
```

3. Start from your current version, run the script(s one by one)

```
upgrade/upgrade_5.0_5.1.sh
```

4. Start the new server version as for any upgrade

```
cd haiwen/seafile-server-5.1.0/
./seafile.sh start
./seahub.sh start # or "./seahub.sh start-fastcgi" if you're using fastcgi
# or via service
/etc/init.d/seafile-server start
```

5. If the new version works file, the old version can be removed

```
rm -rf seafile-server-5.0.0/
```

or alternatively be moved to the directory installed (in case you set it up)

```
mv seafile-server-5.0.0/ installed/
```

Maintenance version upgrade (like from 5.1.2 to 5.1.3)

Maintenance upgrade is like an upgrade from 5.1.2 to 5.1.3.

1. Stop the current server first as for any other upgrade
2. For this type of upgrade, you only need to update the symbolic links (for avatar and a few other folders). We provide a script for you, just run it (For history reason, the script called `minor-upgrade.sh`):

```
cd seafile-server-5.1.2
upgrade/minor-upgrade.sh
```

3. Start the new server version as for any other upgrade

4. If the new version works file, the old version can be removed

```
rm -rf seafile-server-5.1.2/
```

or alternatively be moved to the directory installed (in case you set it up)

```
mv seafile-server-5.1.2/ installed/
```

Upgrade notes

These notes give additional information about changes. Please always follow the main upgrade guide.

Summary

- Upgrade notes for V6.x.x
- Upgrade notes for V5.x.x
- Upgrade notes for V4.x.x

This documentation is just done from V4 + !

Upgrade Notes V6.x.x

Important release changes

From this version, the Wiki module is hidden by default. Users will not be able to turn it on. For compatibility with older versions, it can be turned on by adding the following line to `seahub_settings.py` :

```
ENABLE_WIKI = True
```

V6.1.0

Video Thumbnails

Enable or disable thumbnail for video. ffmpeg and moviepy should be installed first. For details, please refer to the manual.

OnlyOffice

The system requires some minor changes to support the OnlyOffice document server. Please follow the instructions here.

Pip Pillow upgrade

```
# for Ubuntu 16.04
sudo apt-get install libjpeg-dev
pip install --upgrade Pillow
# If the pillow installation fails you may install
# "build-dep python-imaging" instead of just "libjpeg-dev"

# for Debian 8
apt-get install libjpeg-dev
pip install --upgrade Pillow

# If the pillow installation fails you may install
# "build-dep python-imaging" instead of just "libjpeg-dev"

# for Centos 7
sudo yum install libjpeg-dev
pip install --upgrade Pillow
```

Seahub does not start

In case Seahub does not start after the upgrade, install python-requests.

```
sudo apt-get install python-requests
```

V6.0.0 - V6.0.9

There are no other special instructions.

Upgrade Notes V5.x.x

Important release changes

In Seafile 5.0, we moved all config files to the folder `/seafile-root/conf` **, including:**

- seahub_settings.py -> conf/seahub_settings.py
- ccnet/ccnet.conf -> conf/ccnet.conf
- seafile-data/seafile.conf -> conf/seafile.conf
- [pro only] pro-data/seafevents.conf -> conf/seafevents.conf

V5.1.4

Python upgrade If you upgrade to 5.1.4+, you need to install the python 3 libs:

```
# for Ubuntu 16.04
sudo apt-get install python-urllib3

# for Debian 8
apt-get install python-urllib3

# for Centos 7
sudo yum install python-urllib3

# for Arch Linux
pacman -Sy python2-urllib3
```

V5.0.0 - V5.1.3

Nothing to be installed/changed.

Upgrade Notes V4.x.x

These notes just give additional information about changes within each major version.
Please always follow the main installation guide.

Important release changes

- Thumbnail string to number

V4.3.1 - V4.4.6

There are no other special instructions.

V4.3.0

Change the setting of THUMBNAIL_DEFAULT_SIZE from string to number in

`seahub_settings.py` :

Use `THUMBNAIL_DEFAULT_SIZE = 24` , instead of `THUMBNAIL_DEFAULT_SIZE = '24'` .

V4.2.0 - V4.2.3

Note when upgrading to 4.2:

If you deploy Seafile in a non-root domain, you need to add the following extra settings in

`seahub_settings.py` :

```
COMPRESS_URL = MEDIA_URL
STATIC_URL = MEDIA_URL + '/assets/'
```

V4.0.0 - V4.1.2

There are no other special instructions.

Start Seafile at System Bootup

For systems running systemd

- For example Debian 8 and newer, Linux Ubuntu 15.04 and newer

Create systemd service files, change **${seafile_dir}** to your **seafile** installation location and **seafile** to user, who runs **seafile** (if appropriate). Then you need to reload systemd's daemons: **systemctl daemon-reload**.

Create systemd service file /etc/systemd/system/seafile.service

```
sudo vim /etc/systemd/system/seafile.service
```

The content of the file is:

```
[Unit]
Description=Seafile
# add mysql.service or postgresql.service depending on your database to the line below
After=network.target

[Service]
Type=oneshot
ExecStart=${seafile_dir}/seafile-server-latest/seafile.sh start
ExecStop=${seafile_dir}/seafile-server-latest/seafile.sh stop
RemainAfterExit=yes
User=seafile
Group=seafile

[Install]
WantedBy=multi-user.target
```

Create systemd service file /etc/systemd/system/seahub.service

```
sudo vim /etc/systemd/system/seahub.service
```

The content of the file is (please dont forget to change it if you want to run fastcgi):

```
[Unit]
Description=Seafile hub
After=network.target seafile.service

[Service]
# change start to start-fastcgi if you want to run fastcgi
ExecStart=${seafile_dir}/seafile-server-latest/seahub.sh start
ExecStop=${seafile_dir}/seafile-server-latest/seahub.sh stop
User=seafile
Group=seafile
Type=oneshot
RemainAfterExit=yes

[Install]
WantedBy=multi-user.target
```

Create systemd service file /etc/systemd/system/seafile-client.service (optional)

You need to create this service file only if you have **seafile** console client and you want to run it on system boot.

```
sudo vim /etc/systemd/system/seafile-client.service
```

The content of the file is:

```
[Unit]
Description=Seafile client
# Uncomment the next line you are running seafile client on the same computer as serve
r
# After=seafile.service
# Or the next one in other case
# After=network.target

[Service]
Type=oneshot
ExecStart=/usr/bin/seaf-cli start
ExecStop=/usr/bin/seaf-cli stop
RemainAfterExit=yes
User=seafile
Group=seafile

[Install]
WantedBy=multi-user.target
```

Enable service start on system boot

```
sudo systemctl enable seafile.service
sudo systemctl enable seahub.service
sudo systemctl enable seafile-client.service   # optional
```

For systems using another init system than systemd

Ubuntu 14.10 and older

On Ubuntu without systemd we make use of the /etc/init.d/ scripts to start seafile/seahub at system boot.

Create a script /etc/init.d/seafile-server

```
sudo vim /etc/init.d/seafile-server
```

The content of this script is: (You need to modify the value of **user** and **seafile_dir** accordingly)

```
#!/bin/bash
### BEGIN INIT INFO
# Provides:          seafile-server
# Required-Start:    $remote_fs $syslog
# Required-Stop:     $remote_fs $syslog
# Default-Start:     2 3 4 5
# Default-Stop:      0 1 6
# Short-Description: Seafile server
# Description:       Start Seafile server
### END INIT INFO

# Change the value of "user" to your linux user name
user=haiwen

# Change the value of "seafile_dir" to your path of seafile installation
# usually the home directory of $user
seafile_dir=/data/haiwen
script_path=${seafile_dir}/seafile-server-latest
seafile_init_log=${seafile_dir}/logs/seafile.init.log
seahub_init_log=${seafile_dir}/logs/seahub.init.log

# Change the value of fastcgi to false if fastcgi is not used
fastcgi=true
# Set the port of fastcgi, default is 8000. Change it if you need different.
fastcgi_port=8000
#
# Write a polite log message with date and time
```

```
#
echo -e "\n \n About to perform $1 for seafile at `date -Iseconds` \n " >> ${seafile_i
nit_log}
echo -e "\n \n About to perform $1 for seahub at `date -Iseconds` \n " >> ${seahub_ini
t_log}
case "$1" in
        start)
                sudo -u ${user} ${script_path}/seafile.sh ${1} >> ${seafile_init_log}
                if [ $fastcgi = true ];
                then
                        sudo -u ${user} ${script_path}/seahub.sh ${1}-fastcgi ${fastcg
i_port} >> ${seahub_init_log}
                else
                        sudo -u ${user} ${script_path}/seahub.sh ${1} >> ${seahub_init
_log}
                fi
        ;;
        restart)
                sudo -u ${user} ${script_path}/seafile.sh ${1} >> ${seafile_init_log}
                if [ $fastcgi = true ];
                then
                        sudo -u ${user} ${script_path}/seahub.sh ${1}-fastcgi ${fastcg
i_port} >> ${seahub_init_log}
                else
                        sudo -u ${user} ${script_path}/seahub.sh ${1} >> ${seahub_init
_log}
                fi
        ;;
        stop)
                sudo -u ${user} ${script_path}/seahub.sh ${1} >> ${seahub_init_log}
                sudo -u ${user} ${script_path}/seafile.sh ${1} >> ${seafile_init_log}
        ;;
        *)
                echo "Usage: /etc/init.d/seafile-server {start|stop|restart}"
                exit 1
        ;;
esac
```

Note: If you are using local mysql server, please replace `# Required-Start: $remote_fs
$syslog` with `# Required-Start: $remote_fs $syslog mysql` .

Make the seafile-sever script executable

```
sudo chmod +x /etc/init.d/seafile-server
```

Add seafile-server to rc.d

```
sudo update-rc.d seafile-server defaults
```

Note: Don't forget to update the value of **script_path** later if you update your seafile server.

Other Debian based Distributions

Create a script /etc/init.d/seafile-server

```
sudo vim /etc/init.d/seafile-server
```

The content of this script is: (You need to modify the value of **user** and **seafile_dir** accordingly)

```sh
#!/bin/sh

### BEGIN INIT INFO
# Provides:          seafile-server
# Required-Start:    $local_fs $remote_fs $network
# Required-Stop:     $local_fs
# Default-Start:     2 3 4 5
# Default-Stop:      0 1 6
# Short-Description: Starts Seafile Server
# Description:       starts Seafile Server
### END INIT INFO

# Change the value of "user" to linux user name who runs seafile
user=haiwen

# Change the value of "seafile_dir" to your path of seafile installation
# usually the home directory of $user
seafile_dir=/data/haiwen
script_path=${seafile_dir}/seafile-server-latest
seafile_init_log=${seafile_dir}/logs/seafile.init.log
seahub_init_log=${seafile_dir}/logs/seahub.init.log

# Change the value of fastcgi to true if fastcgi is to be used
fastcgi=false
# Set the port of fastcgi, default is 8000. Change it if you need different.
fastcgi_port=8000

#
# Write a polite log message with date and time
#
echo -e "\n \n About to perform $1 for seafile at `date -Iseconds` \n " >> ${seafile_init_log}
echo -e "\n \n About to perform $1 for seahub at `date -Iseconds` \n " >> ${seahub_init_log}

case "$1" in
        start)
                sudo -u ${user} ${script_path}/seafile.sh ${1} >> ${seafile_init_log}
                if [ $fastcgi = true ];
                then
                        sudo -u ${user} ${script_path}/seahub.sh ${1}-fastcgi ${fastcgi_port} >> ${seahub_init_log}
                else
```

```
                            sudo -u ${user} ${script_path}/seahub.sh ${1} >> ${seahub_init
_log}
                fi
        ;;
        restart)
                sudo -u ${user} ${script_path}/seafile.sh ${1} >> ${seafile_init_log}
                if [ $fastcgi = true ];
                then
                        sudo -u ${user} ${script_path}/seahub.sh ${1}-fastcgi ${fastcg
i_port} >> ${seahub_init_log}
                else
                        sudo -u ${user} ${script_path}/seahub.sh ${1} >> ${seahub_init
_log}
                fi
        ;;
        stop)
                sudo -u ${user} ${script_path}/seahub.sh ${1} >> ${seahub_init_log}
                sudo -u ${user} ${script_path}/seafile.sh ${1} >> ${seafile_init_log}
        ;;
        *)
                echo "Usage: /etc/init.d/seafile-server {start|stop|restart}"
                exit 1
        ;;
esac
```

Note:

1. If you want to start seahub in fastcgi, just change the **fastcgi** variable to **true**
2. If you deployed Seafile with MySQL, append "mysql" to the Required-Start line:

```
# Required-Start: $local_fs $remote_fs $network mysql
```

Add Directory for Logfiles

```
mkdir /path/to/seafile/dir/logs
```

Make the seafile-sever script executable

```
sudo chmod +x /etc/init.d/seafile-server
```

Add seafile-server to rc.d

```
sudo update-rc.d seafile-server defaults
```

Done

Don't forget to update the value of **seafile_dir** later if you update your seafile server.

RHEL/CentOS

On RHEL/CentOS, the script /etc/rc.local is executed by the system at bootup, so we start seafile/seahub there.

- Locate your python executable (python 2.6 or 2.7)

```
which python2.6 # or "which python2.7"
```

- In /etc/rc.local, add the directory of python2.6(2.7) to **PATH**, and add the seafile/seahub start command

```
`
# Assume the python 2.6(2.7) executable is in "/usr/local/bin"
PATH=$PATH:/usr/local/bin/

# Change the value of "user" to your linux user name
user=haiwen

# Change the value of "seafile_dir" to your path of seafile installation
# usually the home directory of $user
seafile_dir=/data/haiwen
script_path=${seafile_dir}/seafile-server-latest

sudo -u ${user} ${script_path}/seafile.sh start > /tmp/seafile.init.log 2>&1
sudo -u ${user} ${script_path}/seahub.sh start > /tmp/seahub.init.log 2>&1
```

Note: If you want to start seahub in fastcgi, just change the **"seahub.sh start"** in the last line above to **"seahub.sh start-fastcgi"**

- Done. Don't forget to update the value of **seafile_dir** later if you update your seafile server.

RHEL/CentOS (run as service)

On RHEL/CentOS we make use of the /etc/init.d/ scripts to start seafile/seahub at system boot as service.

Create a file /etc/sysconfig/seafile

```
# Change the value of "user" to your linux user name
user=haiwen

# Change the value of "seafile_dir" to your path of seafile installation
# usually the home directory of $user
seafile_dir=/data/haiwen
script_path=${seafile_dir}/seafile-server-latest
seafile_init_log=${seafile_dir}/logs/seafile.init.log
seahub_init_log=${seafile_dir}/logs/seahub.init.log

# Change the value of fastcgi to true if fastcgi is to be used
fastcgi=false

# Set the port of fastcgi, default is 8000. Change it if you need different.
fastcgi_port=8000
```

Create a script /etc/init.d/seafile

```bash
#!/bin/bash
#
# seafile

#
# chkconfig: - 68 32
# description: seafile

# Source function library.
. /etc/init.d/functions

# Source networking configuration.
. /etc/sysconfig/network

if [ -f /etc/sysconfig/seafile ];then
        . /etc/sysconfig/seafile
        else
            echo "Config file /etc/sysconfig/seafile not found! Bye."
            exit 200
        fi

RETVAL=0

start() {
        # Start daemons.
        echo -n $"Starting seafile: "
        ulimit -n 30000
        su - ${user} -c"${script_path}/seafile.sh start >> ${seafile_init_log} 2>&1"
        RETVAL=$?
        echo
        [ $RETVAL -eq 0 ] && touch /var/lock/subsys/seafile
        return $RETVAL
}

stop() {
```

```
        echo -n $"Shutting down seafile: "
        su - ${user} -c"${script_path}/seafile.sh stop >> ${seafile_init_log} 2>&1"
        RETVAL=$?
        echo
        [ $RETVAL -eq 0 ] && rm -f /var/lock/subsys/seafile
        return $RETVAL
}


#
# Write a polite log message with date and time
#
echo -e "\n \n About to perform $1 for seafile at `date -Iseconds` \n " >> ${seafile_i
nit_log}


# See how we were called.
case "$1" in
  start)
        start
        ;;
  stop)
        stop
        ;;
  restart|reload)
        stop
        start
        RETVAL=$?
        ;;
  *)
        echo $"Usage: $0 {start|stop|restart}"
        RETVAL=3
esac


exit $RETVAL
```

Create a script /etc/init.d/seahub

```
#!/bin/bash
#
# seahub


#
# chkconfig: - 69 31
# description: seahub


# Source function library.
. /etc/init.d/functions


# Source networking configuration.
. /etc/sysconfig/network


if [ -f /etc/sysconfig/seafile ];then
        . /etc/sysconfig/seafile
        else
            echo "Config file /etc/sysconfig/seafile not found! Bye."
```

```
              exit 200
        fi


RETVAL=0


start() {
        # Start daemons.
        echo -n $"Starting seahub: "
        ulimit -n 30000
        if [  $fastcgi = true ];
                then
                su - ${user} -c"${script_path}/seahub.sh start-fastcgi ${fastcgi_port}
 >> ${seahub_init_log} 2>&1"
                else
                su - ${user} -c"${script_path}/seahub.sh start >> ${seahub_init_log} 2
>&1"
                fi
        RETVAL=$?
        echo
        [ $RETVAL -eq 0 ] && touch /var/lock/subsys/seahub
        return $RETVAL
}


stop() {
        echo -n $"Shutting down seahub: "
        su - ${user} -c"${script_path}/seahub.sh stop >> ${seahub_init_log} 2>&1"
        RETVAL=$?
        echo
        [ $RETVAL -eq 0 ] && rm -f /var/lock/subsys/seahub
        return $RETVAL
}


#
# Write a polite log message with date and time
#
echo -e "\n \n About to perform $1 for seahub at `date -Iseconds` \n " >> ${seahub_ini
t_log}


# See how we were called.
case "$1" in
  start)
        start
        ;;
  stop)
        stop
        ;;
  restart|reload)
        stop
        start
        RETVAL=$?
        ;;
  *)
        echo $"Usage: $0 {start|stop|restart}"
        RETVAL=3
esac
```

```
exit $RETVAL
```

Next, enable services:

```
chmod 550 /etc/init.d/seafile
chmod 550 /etc/init.d/seahub
chkconfig --add seafile
chkconfig --add seahub
chkconfig seahub on
chkconfig seafile on
```

and run:

```
service seafile start
service seahub start
```

Firewall settings

By default the ports `8000` and `8082` need to be opened in the firewall for incoming TCP connections.

If you run Seafile behind Nginx/Apache with HTTPS, you only need to open port 443 TCP.

Set up logrotate for server

How it works

seaf-server, ccnet-server (since version 3.1) and seafile-controller (since version 6.0.8) support reopenning logfiles by receiving a `SIGUR1` signal.

This feature is very useful when you need cut logfiles while you don't want to shutdown the server. All you need to do now is cutting the logfile on the fly.

> **NOTE**: signal is not supported by windows, so the feature is not available there.

Default logrotate configuration directory

For debian, the default directory for logrotate should be `/etc/logrotate.d/`

Sample configuration

Assuming your ccnet-server's logfile is `/home/haiwen/logs/ccnet.log` and your ccnet-server's pidfile for ccnet-server is `/home/haiwen/pids/ccnet.pid`.

Assuming your seaf-server's logfile is setup to `/home/haiwen/logs/seafile.log` and your seaf-server's pidfile for seaf-server is setup to `/home/haiwen/pids/seaf-server.pid`.

Assuming your seafile-controller's logfile is setup to `/home/haiwen/logs/controller.log` and your seafile-controller's pidfile for seafile-controller is setup to `/home/haiwen/pids/controller.pid`.

Assuming your seafevents logfile is located at `/home/haiwen/logs/seafevents.log`.

Assuming your seafile-init logfile is located at `/home/haiwen/logs/seafile.init.log`.

Assuming your seahub-init logfile is located at `/home/haiwen/logs/seahub.init.log`:

The configuration for logrotate could be like this:

```
/home/haiwen/logs/seafile.log
{
        daily
        missingok
        rotate 52
        compress
        delaycompress
        notifempty
```

```
        sharedscripts
        postrotate
                [ ! -f /home/haiwen/pids/seaf-server.pid ] || kill -USR1 `cat /home/ha
iwen/pids/seaf-server.pid`
        endscript
}

/home/haiwen/logs/ccnet.log
{
        daily
        missingok
        rotate 52
        compress
        delaycompress
        notifempty
        sharedscripts
        postrotate
                [ ! -f /home/haiwen/pids/ccnet.pid ] || kill -USR1 `cat /home/haiwen/p
ids/ccnet.pid`
        endscript
}

/home/haiwen/logs/controller.log
{
        daily
        missingok
        rotate 52
        compress
        delaycompress
        notifempty
        sharedscripts
        postrotate
                [ ! -f /home/haiwen/pids/controller.pid ] || kill -USR1 `cat /home/hai
wen/pids/controller.pid`
        endscript
}

/home/haiwen/logs/seafevents.log
{
    monthly
    missingok
    rotate 24
    compress
    delaycompress
    notifempty
    sharedscripts
}

/home/haiwen/logs/seafile.init.log
{
    monthly
    missingok
    rotate 24
    compress
    delaycompress
    notifempty
```

```
    sharedscripts
}


/home/haiwen/logs/seahub.init.log
{
    monthly
    missingok
    rotate 24
    compress
    delaycompress
    notifempty
    sharedscripts
}
```

You can save this file, in debian for example, at `/etc/logrotate.d/seafile` . Other log files can also be configured in the same way (without postrotate), like `seahub.log` , `seahub_django_request.log` , etc.

```
    sharedscripts
}


/home/haiwen/logs/seahub.init.log
{
    monthly
    missingok
    rotate 24
    compress
    delaycompress
    notifempty
    sharedscripts
}
```

Add memcached

Seahub caches items (avatars, profiles, etc) on the file system in /tmp/seahub_cache/ by default. You can use memcached instead to improve the performance.

First, make sure `libmemcached` library and development headers are installed on your system. Version 1.0.18 of libmemcached or later should be used.

On Ubuntu 16.04 or similar, the version in system repository is new enough. So you can install it directly.

```
sudo apt-get install libmemcached-dev
```

On other systems, such as CentOS 7 or Ubuntu 14.04, you should install the library from source code.

```
sudo apt-get install build-essential # or sudo yum install gcc gcc-c++ make openssl-devel
wget https://launchpad.net/libmemcached/1.0/1.0.18/+download/libmemcached-1.0.18.tar.gz
tar zxf libmemcached
cd libmemcached-1.0.18
./configure
make
sudo make install
```

Install Python memcache library.

```
sudo pip install pylibmc
sudo pip install django-pylibmc
```

Add the following configuration to `seahub_settings.py` .

```
CACHES = {
    'default': {
        'BACKEND': 'django_pylibmc.memcached.PyLibMCCache',
        'LOCATION': '127.0.0.1:11211',
    }
}
```

If you use a memcached cluster, please replace the `CACHES` variable with the following. This configuration uses consistent hashing to distribute the keys in memcached. More information can be found on pylibmc documentation and django-pylibmc documentation. Supposed your memcached server addresses are 192.168.1.13[4-6].

Add Memcached

```python
CACHES = {
    'default': {
        'BACKEND': 'django_pylibmc.memcached.PyLibMCCache',
        'LOCATION': ['192.168.1.134:11211', '192.168.1.135:11211', '192.168.1.136:11211',],
        'OPTIONS': {
            'ketama': True,
            'remove_failed': 1,
            'retry_timeout': 3600,
            'dead_timeout': 3600
        }
    }
}
```

Deploy Seafile behind NAT

A lot of people want to deploy a seafile server in their LAN, and access it from the WAN.

To achieve this, you need:

- A router which supports port forwarding
- Use a dynamic DNS Service
- Modify your seafile server configuration

Table of Contents

Setup the server

First, you should follow the guide on Download and Setup Seafile Server to setup your Seafile server.

Before you continue, make sure:

- You can visit your seahub website
- You can download/sync a library through your seafile client

Setup Port Forwarding in Your Router

Ensure Your Router Supports Port Forwarding

First, ensure your router supports port forwarding.

- Login to the web adminstration page of your router. If you don't know how to do this, you should find the instructions on the manual of the router. If you have no maunal, just google **"XXX router administration page"** where `xxx` is your router's brand.

- Navigate around in the adminstration page, and check if there is a tag which contains a word such as "forward", "advanced". If your router supports it, chances are that you can find the port forwarding related settings there.

Setup Port Forwarding Rules

Seafile server is composed of several components. You need to configure port forward for all the components listed below.

component	default port
fileserver	8082
seahub	8000

- You don't need to open port 8000 and 8082 if you deploy Seafile behind Apache/Nginx.
- If you're not using the default ports, you should adjust the table accroding to your own customiztion.

How to test if your port forwarding is working

After you have set the port forwarding rules on your router, you can check whether it works by:

- Open a command line prompt
- Get your WAN IP. A convenient way to get your WAN ip is to visit `http://who.is` , which would show you your WAN IP.
- Try to connect your seahub server

```
telnet <Your WAN IP> 8000
```

If your port forwarding is working, the command above should succeed. Otherwise, you may get a message saying something like *connection refused* or *connection timeout*.

If your port forwarding is not working, the reasons may be:

- You have configured a wrong port forwarding
- Your router may need a restart
- You network may be down

Set SERVICE_URL

"SERVICE_URL" in `ccnet.conf` is used to generate the download/upload link for files when you browse files online. Set it using your WAN IP.

```
SERVICE_URL = http://<Your WAN IP>:8000
```

Most routers support NAT loopback. When your access Seafile web from intranet, file download/upload still works even when external IP is used.

Use a Dynamic DNS Serivce

Why use a Dynamic DNS(DDNS) Service?

Having done all the steps above, you should be able to visit your seahub server outside your LAN by your WAN IP. But for most people, the WAN IP address is likey to change regularly by their ISP(Internet Serice Provider), which makes this approach impratical.

You can use a dynamic DNS(DDNS) Service to overcome this problem. By using a dynamic DNS service, you can visit your seahub by domain name (instead of by IP), and the domain name will always be mapped to your WAN IP address, even if it changes regularly.

There are a dozen of dynmaic DNS service providers on the internet. If you don't know what service to choose We recommend using www.noip.com since it performs well in our testing.

The detailed process is beyond the scope of this wiki. But basically, you should:

1. Choose a DDNS service provider
2. Register an account on the DDNS service provider's website
3. Download a client from your DDNS service provider to keep your domain name always mapped to your WAN IP

Modify your seafile configuration

After you have setup your DDNS service, you need to modify the `ccnet.conf` :

```
SERVICE_URL = http://<Your dynamic DNS domain>:8000
```

Restart your seafile server after this.

Deploy Seahub at Non-root domain

This documentation will talk about how to deploy Seafile Web using Apache/Nginx at Non-root directory of the website(e.g., www.example.com/seafile/). Please note that the file server path will still be e.g. www.example.com/seafhttp (rather than www.example.com/seafile/seafhttp) because this path is hardcoded in the clients.

Note: We assume you have read Deploy Seafile with nginx or Deploy Seafile with apache.

Configure Seahub

First, we need to overwrite some variables in seahub_settings.py:

```
SERVE_STATIC = False
MEDIA_URL = '/seafmedia/'
COMPRESS_URL = MEDIA_URL
STATIC_URL = MEDIA_URL + 'assets/'
SITE_ROOT = '/seafile/'
LOGIN_URL = '/seafile/accounts/login/'    # NOTE: since version 5.0.4
```

The webserver will serve static files (js, css, etc), so we just disable `SERVE_STATIC`.

`MEDIA_URL` can be anything you like, just make sure a trailing slash is appended at the end.

We deploy Seafile at `/seafile/` directory instead of root directory, so we set `SITE_ROOT` to `/seafile/`.

Modify ccnet.conf and seahub_setting.py

Modify ccnet.conf

You need to modify the value of `SERVICE_URL` in ccnet.conf to let Seafile know the domain you choose.

```
SERVICE_URL = http://www.myseafile.com/seafile
```

Note: If you later change the domain assigned to seahub, you also need to change the value of `SERVICE_URL`.

Modify seahub_settings.py

You need to add a line in `seahub_settings.py` to set the value of `FILE_SERVER_ROOT`

```
FILE_SERVER_ROOT = 'http://www.myseafile.com/seafhttp'
```

Note: The file server path MUST be `/seafhttp` because this path is hardcoded in the clients.

Webserver configuration

Deploy with Nginx

Then, we need to configure the Nginx:

```
server {
    listen 80;
    server_name www.example.com;

    proxy_set_header X-Forwarded-For $remote_addr;

    location /seafile {
        fastcgi_pass    127.0.0.1:8000;
        fastcgi_param   SCRIPT_FILENAME     $document_root$fastcgi_script_name;
        fastcgi_param   PATH_INFO           $fastcgi_script_name;

        fastcgi_param   SERVER_PROTOCOL     $server_protocol;
        fastcgi_param   QUERY_STRING        $query_string;
        fastcgi_param   REQUEST_METHOD      $request_method;
        fastcgi_param   CONTENT_TYPE        $content_type;
        fastcgi_param   CONTENT_LENGTH      $content_length;
        fastcgi_param   SERVER_ADDR         $server_addr;
        fastcgi_param   SERVER_PORT         $server_port;
        fastcgi_param   SERVER_NAME         $server_name;
#       fastcgi_param   HTTPS               on; # enable this line only if https is used
        access_log      /var/log/nginx/seahub.access.log;
        error_log       /var/log/nginx/seahub.error.log;
    }

    location /seafhttp {
        rewrite ^/seafhttp(.*)$ $1 break;
        proxy_pass http://127.0.0.1:8082;
        client_max_body_size 0;
    }

    location /seafmedia {
        rewrite ^/seafmedia(.*)$ /media$1 break;
        root /home/user/haiwen/seafile-server-latest/seahub;
    }
}
```

Deploy with Apache

Here is the sample configuration:

```
<VirtualHost *:80>
  ServerName www.example.com
  DocumentRoot /var/www
  Alias /seafmedia  /home/user/haiwen/seafile-server-latest/seahub/media

  <Location /seafmedia>
    ProxyPass !
    Require all granted
  </Location>

  RewriteEngine On

  #
  # seafile fileserver
  #
  ProxyPass /seafhttp http://127.0.0.1:8082
  ProxyPassReverse /seafhttp http://127.0.0.1:8082
  RewriteRule ^/seafhttp - [QSA,L]

  #
  # seahub
  #
  SetEnvIf Request_URI . proxy-fcgi-pathinfo=unescape
  SetEnvIf Authorization "(.*)" HTTP_AUTHORIZATION=$1
  ProxyPass /seafile fcgi://127.0.0.1:8000/seafile
</VirtualHost>
```

We use Alias to let Apache serve static files, please change the second argument to your path.

Clear the cache

By default, Seahub caches some data like the link to the avatar icon in `/tmp/seahub_cache/` (unless memcache is used). We suggest to clear the cache after seafile has been stopped:

```
rm -rf /tmp/seahub_cache/
```

For memcache users, please purge the cache there instead by restarting your memcached server.

Start Seafile and Seahub

```
./seafile.sh start
./seahub.sh start # or "./seahub.sh start-fastcgi" if you're using fastcgi
```

```
./seafile.sh start
./seahub.sh start # or "./seahub.sh start-fastcgi" if you're using fastcgi
```

Migrate From SQLite to MySQL

NOTE: The tutorial is only available for Seafile CE version.

First make sure the python module for MySQL is installed. On Ubuntu, use `sudo apt-get install python-mysqldb` to install it.

Steps to migrate Seafile from SQLite to MySQL:

1. Stop Seafile and Seahub.

2. Download sqlite_to_mysql.sh to the top directory of your Seafile installation path. For example, `/data/haiwen` .

3. Run `sqlite_to_mysql.sh` , this script will produce three files (ccnet_db_data.sql, seafile_db_data.sql, seahub_db_data.sql).

   ```
   chmod +x sqlite_to_mysql.sh
   ./sqlite_to_mysql.sh
   ```

4. Download these three files to `/data/haiwen` , ce_ccnet_db.sql, ce_seafile_db.sql, mysql.sql(used for create tables in `seahub_db`).

5. Rename `mysql.sql` to `ce_seahub_db.sql` : `mv mysql.sql ce_seahub_db.sql` . Now you should have the following directory layout.

   ```
   .
   └── haiwen
   |    ...
   |    ...
   |    ├── ce_ccnet_db.sql
   |    ├── ce_seafile_db.sql
   |    ├── ce_seahub_db.sql
   |    ├── ccnet_db_data.sql
   |    ├── seafile_db_data.sql
   |    ├── seahub_db_data.sql
   |    ...
   |    ├── seafile-data
   |    ├── seahub-data
   |    ├── seahub.db
   |    ...
   |    ...
   ```

6. Create 3 databases ccnet_db, seafile_db, seahub_db and seafile user.

```
mysql> create database ccnet_db character set = 'utf8';
mysql> create database seafile_db character set = 'utf8';
mysql> create database seahub_db character set = 'utf8';
```

7. Import ccnet data to MySql.

```
mysql> use ccnet_db;
mysql> source ce_ccnet_db.sql;
mysql> source ccnet_db_data.sql;
```

8. Import seafile data to MySql.

```
mysql> use seafile_db;
mysql> source ce_seafile_db.sql;
mysql> source seafile_db_data.sql;
```

9. Import seahub data to MySql.

```
mysql> use seahub_db;
mysql> source ce_seahub_db.sql;
mysql> source seahub_db_data.sql;
```

10. Modify configure files.

   Append following lines to ccnet.conf:

```
[Database]
ENGINE=mysql
HOST=127.0.0.1
USER=root
PASSWD=root
DB=ccnet_db
CONNECTION_CHARSET=utf8
```

   Note: Use `127.0.0.1` , don't use `localhost` .

   Replace the database section in `seafile.conf` with following lines:

```
[database]
type=mysql
host=127.0.0.1
user=root
password=root
db_name=seafile_db
CONNECTION_CHARSET=utf8
```

   Append following lines to `seahub_settings.py` :

```
DATABASES = {
    'default': {
        'ENGINE': 'django.db.backends.mysql',
        'USER' : 'root',
        'PASSWORD' : 'root',
        'NAME' : 'seahub_db',
        'HOST' : '127.0.0.1',
        # This is only needed for MySQL older than 5.5.5.
        # For MySQL newer than 5.5.5 INNODB is the default already.
        'OPTIONS': {
            "init_command": "SET storage_engine=INNODB",
        }
    }
}
```

11. Restart seafile and seahub

NOTE

User notifications will be cleared during migration due to the slight difference between MySQL and SQLite, if you only see the busy icon when click the notitfications button beside your avatar, please remove `user_notitfications` table manually by:

```
use seahub_db;
delete from notifications_usernotification;
```

Config files location change in Seafile Server 5.0.0

Seafile server has various components, each of them has its own config files. These files used to be in different directories, which is inconvenient to manage.

This is the layout before Seafile Server 5.0.0:

```
└── seahub_settings.py
└── ccnet/
    └── ccnet.conf
└── seafile/
    └── seafile.conf
└── conf/
    └── seafdav.conf
└── pro-data/
    └── seafevents.conf # (professional edition only)
└── seafile-server-latest/
```

Since Seafile Server 5.0.0, all config files are moved to the **conf** folder:

```
└── conf/
    └── ccnet.conf
    └── seafile.conf
    └── seafdav.conf
    └── seahub_settings.py
    └── seafevents.conf # (professional edition only)
└── ccnet/
└── seafile/
└── pro-data/
```

This way, it's much easier to manage the configurations since all files can be found in the same place.

When you upgrading to seafile 5.0.0, the upgrade script would move these files to the central **conf/** folder for you.

Deploy with Windows

Note: Seafile Windows server is not suitable to be used in an environment with more than 25 users. In the latter case, please use Seafile Linux server.

Setup and Upgrade

Seafile Windows Community Edition supports SQLite/MySQL database.

- Download and Setup Seafile Windows Server
- Deploy Seafile with MySQL
- Deploy Seafile with Apache
- Deploy Seafile with Nginx
- LDAP Integration
- Install Seafile Server as a Windows Service
- Ports used by Seafile Windows Server
- Upgrading Seafile Windows Server
- Options & Customization

For more information on Seafile server, check the documents on Seafile Linux version

Server Administration

- Garbage Collecting Unused Blocks on Seafile Server
- Running seaf-fsck on corrupted repositories

Common Issues

If you failed to set up Seafile server, first check seafserv-applet.log.

"ERROR: D:/seafile-server\seahub.db not found"

This file is created during Seafile initialization. Please:

- Check whether your Python and the `PATH` for Python is correctly set.
- Put Seafile server package in a simple path, like `C:\seafile-packages` .

Failed to create seahub.db

Use python version 2.7.11 32bit, do not use python 3+.

Can not upload/download files in the Web interface

Make sure you have modified `SERVICE_URL` in ccnet.conf. You can also modify SERVICE_URL via web UI in "System Admin->Settings". (**Warning**: if you set the value both via Web UI and ccnet.conf, the setting via Web UI will take precedence.)

The browser can't get the css and javascript files

- Use python 2.7.11 32bit. If you have installed other python version, uninstall it and install python 2.7.11. Restart seafile server to see whether the problem has gone.
- Delete non-ASCII keys from the registry path `HKEY_CLASSES_ROOT\MIME\Database\Content` Type, and try again.

"Page unavailable" when visit http://127.0.0.1:8000

Please check the log file `seahub_django_request.log` under the folder `seafile-server/logs` .

Download and Setup Seafile Windows Server

Download/Uncompress

Install Python 2.7.11 32bit

- Download and install python 2.7.11 32bit
- Add the installation path of python2.7 to the system PATH environment variable. If you installed python 2.7 to `C:\Python27` add `C:\Python27` to the PATH environment variable.

Warning: Be sure to use Python 2.7.13 32bit. 64bit and other versions don't work.

Download/Uncompress Seafile Server

- Get the latest version of Seafile Server program
- Create a new folder to store seafile program, such as `C:\SeafileProgram\` . Please remember the location of the folder, we'll use it later.
- Uncompress `seafile-server_5.1.3_win32.tar.gz` to `C:\SeafileProgram\`

Now you have a folder like this:

```
C:\SeafileProgram
        |__ seafile-server-5.1.3
```

Start/Initialization

Start Seafile Server

Go to the folder `C:\SeafileProgram\seafile-server-5.1.3\` , and double click run.bat to start Seafile Server. You should notice a seafile icon appear in the system tray.

Choose a disk to store Seafile Server data

If there is more than one disk available, you will now be prompted a with dialog to choose the disk on which to store the data of seafile server.

- Please choose a disk with enough free space
- Once you have clicked the OK button, Seafile will create a folder named seafile-server

on the disk you have chosen. This is the data folder for Seafile Server. For example, if you choose disk D, your data folder will be `D:\seafile-server`

Add an admin account

Right click the tray icon of Seafile Server and choose **Add an admin account**. Input your admin username and password in the dialog prompt.

If the operation is successful, the tray icon will show a bubble saying **Successfully added the admin account**

Configure Seafile Server

After initialization, there are some options that need to be configured:

- Right click the tray icon, choose **Open seafile-server folder**. Your seafile-server data folder will open.
- Open the file `conf/ccnet.conf` and modify the following line. (You can also modify SERVICE_URL via web UI in "System Admin->Settings". **Warning**: if you set the value both via Web UI and ccnet.conf, the setting via Web UI will take precedence.)

```
SERVICE_URL = XXX
```

- Change the value of `SERVICE_URL` to `http://<your ip address>:8000` . Say the ip address of your windows server is 192.168.1.100, then change it to `SERVICE_URL = http://192.168.1.100:8000`

After the edit, right click tray icon and choose **Restart seafile**

Visit Seahub

Open your browser and visit `http://127.0.0.1:8000` . Login with the admin account. If you can login, the initialization is successful.

Seafile Server configuration is complete. Please see the Seafile Client Manual for how to use the client.

You may also want to read about:

- Deploy Seafile with MySQL
- Deploy Seafile with Apache
- Deploy Seafile with Nginx
- LDAP Integration
- Install Seafile Server as a Windows Service
- Ports used by Seafile Windows Server

- Upgrading Seafile Windows Server
- Options & Customization

Configure Seafile to use LDAP

Note: This documentation is for the Community Edition. If you're using Pro Edition, please refer to [the Seafile Pro documentation|../deploy_pro/using_ldap_pro.md].

How does LDAP User Management Works in Seafile

When Seafile is integrated with LDAP/AD, users in the system can be divided into two tiers:

- Users within Seafile's internal user database. Some attributes are attached to these users, such as whether it's a system admin user, whether it's activated. This tier includes two types of users:
    - Native users: these users are created by the admin on Seafile's system admin interface. These users are stored in the `EmailUser` table of the `ccnet` database.
    - Users imported from LDAP/AD server: When a user in LDAP/AD logs into Seafile, its information will be imported from LDAP/AD server into Seafile's database. These users are stored in the `LDAPUsers` table of the `ccnet` database.
- Users in LDAP/AD server. These are all the intended users of Seafile inside the LDAP server. Seafile doesn't manipulate these users directly. It has to import them into its internal database before setting attributes on them.

When Seafile counts the user number in the system, it only counts the **activated** users in its internal database.

When Seafile is integrated with LDAP/AD, it'll look up users from both the internal database and LDAP server. As long as the user exists in one of these two sources, it can log into the system.

Basic LDAP/AD Integration

The only requirement for Seafile to use LDAP/AD for authentication is that, there must be a unique identifier for each user in the LDAP/AD server. Seafile can only use email-address-format user identifiers. So there are usually only two options for this unique identifier:

- Email address: this is the most common choice. Most organizations assign unique email address for each member.
- UserPrincipalName: this is a user attribute only available in Active Directory. It's format is `user-login-name@domain-name`, e.g. `john@example.com`. It's not a real email address, but it works fine as the unique identifier.

Connecting to Active Directory

To use AD to authenticate user, please add the following lines to ccnet.conf.

If you choose email address as unique identifier:

```
[LDAP]
HOST = 192.168.1.123
USE_SSL = false
BASE = cn=users,dc=example,dc=com
USER_DN = administrator@example.local
PASSWORD = secret
LOGIN_ATTR = mail
```

If you choose UserPrincipalName as unique identifier:

```
[LDAP]
HOST = 192.168.1.123
USE_SSL = false
BASE = cn=users,dc=example,dc=com
USER_DN = administrator@example.local
PASSWORD = secret
LOGIN_ATTR = userPrincipalName
```

Meaning of each config options:

- HOST: LDAP URL for the host. ldap://, ldaps:// and ldapi:// are supported. You can also include port number in the URL, like ldap://ldap.example.com:389. To use TLS, you should configure the LDAP server to listen on LDAPS port and specify ldaps:// here. More details about TLS will be covered below.
- BASE: The root distinguished name (DN) to use when running queries against the directory server. **You cannot use the root DN (e.g. dc=example,dc=com) as BASE**.
- USER_DN: The distinguished name of the user that Seafile will use when connecting to the directory server. This user should have sufficient privilege to access all the nodes under BASE. It's recommended to use a user in the administrator group.
- PASSWORD: Password of the above user.
- LOGIN_ATTR: The attribute used for user's unique identifier. Use `mail` or `userPrincipalName`.

Tips for choosing BASE and USER_DN:

- To determine the BASE, you first have to navigate your organization hierachy on the domain controller GUI.
  - If you want to allow all users to use Seafile, you can use 'cn=users,dc=yourdomain,dc=com' as BASE (with proper adjustment for your own needs).
  - If you want to limit users to a certain OU (Organization Unit), you run `dsquery`

> command on the domain controller to find out the DN for this OU. For example, if
> the OU is 'staffs', you can run 'dsquery ou -name staff'. More information can be
> found here.

- AD supports 'user@domain.name' format for the USER_DN option. For example you
  can use administrator@example.com for USER_DN. Sometime the domain controller
  doesn't recognize this format. You can still use `dsquery` command to find out user's
  DN. For example, if the user name is 'seafileuser', run `dsquery user -name seafileuser` .
  More information here.

Connecting to other LDAP servers

Please add the following options to ccnet.conf:

```
[LDAP]
HOST = 192.168.1.123
USE_SSL = false
BASE = ou=users,dc=example,dc=com
USER_DN = cn=admin,dc=example,dc=com
PASSWORD = secret
LOGIN_ATTR = mail
```

The meaning of the options are the same as described in the previous section. With other
LDAP servers, you can only use `mail` attribute as user's unique identifier.

Advanced LDAP/AD Integration Options

Multiple BASE

Multiple base DN is useful when your company has more than one OUs to use Seafile. You
can specify a list of base DN in the "BASE" config. The DNs are separated by ";", e.g.
`ou=developers,dc=example,dc=com;ou=marketing,dc=example,dc=com`

Additional Search Filter

Search filter is very useful when you have a large organization but only a portion of people
want to use Seafile. The filter can be given by setting "FILTER" config. The value of this
option follows standard LDAP search filter syntax (https://msdn.microsoft.com/en-
us/library/aa746475(v=vs.85).aspx).

The final filter used for searching for users is `(&($LOGIN_ATTR=*)($FILTER))` . `$LOGIN_ATTR`
and `$FILTER` will be replaced by your option values.

For example, add the following line to LDAP config:

```
FILTER = memberOf=CN=group,CN=developers,DC=example,DC=com
```

The final search filter would be `(&(mail=*)` `(memberOf=CN=group,CN=developers,DC=example,DC=com))`

Note that the cases in the above example is significant. The `memberOf` attribute is only available in Active Directory.

Limiting Seafile Users to a Group in Active Directory

You can use the FILTER option to limit user scope to a certain AD group.

1. First, you should find out the DN for the group. Again, we'll use `dsquery` command on the domain controller. For example, if group name is 'seafilegroup', run `dsquery group -name seafilegroup`.
2. Add following line to LDAP config:

```
FILTER = memberOf={output of dsquery command}
```

Deploy Seafile Windows Server With MySQL

Preparation

- [Download and Setup Seafile Windows Server](#)
- Stop seafile windows server
  - Right click the seafile server tray icon
  - Choose "Quit and shutdown Seafile Server"
- Make sure your MySQL server is running

Install MySQL-python Library

- download the windows installer from https://pypi.python.org/pypi/MySQL-python/1.2.5
- install it by double clicking the downloaded exe file

Create MySQL Databases

You need to create:

- databases for ccnet/seafile/seahub
- a new user to access these databases

Open a termial (cmd, Win + R, cmd) and login to mysql with a privileged user:

```
mysql -u root -p
```

Execute these SQL setences on your mysql server:

```
create database `ccnet-db` character set = 'utf8';
create database `seafile-db` character set = 'utf8';
create database `seahub-db` character set = 'utf8';

create user 'seafile'@'localhost' identified by 'your secure password';

GRANT ALL PRIVILEGES ON `ccnet-db`.* to `seafile`;
GRANT ALL PRIVILEGES ON `seafile-db`.* to `seafile`;
GRANT ALL PRIVILEGES ON `seahub-db`.* to `seafile`;
```

Modify Your Seafile Configuations

- Append the following lines to **ccnet/ccnet.conf**:

```
[Database]
ENGINE=mysql
HOST=localhost
USER=seafile
PASSWD=your secure password
DB=ccnet-db
```

- Edit the `database` section of **seafile-data/seafile.conf**:

```
[database]
type=mysql
host=localhost
user=seafile
password=your secure password
db_name=seafile-db
```

- Append following lines to **seahub_settings.py**

```
DATABASES = {
    'default': {
        'ENGINE': 'django.db.backends.mysql',
        'NAME' : 'seahub-db',
        'USER' : 'seafile',
        'PASSWORD' : 'your secure password',
        'HOST' : 'localhost',
    }
}
```

Create Database Tables for Seahub

Now we create the database tables for seahub.

Assume you have uncompressed seafile server to `C:/SeafileProgram/seafile-pro-server-3.1.3` ,

Open a window command line prompt, and execute the following command:

```
mysql -u seafile -p seahub-db < C:/SeafileProgram/seafile-server-3.1.3/seahub/sql/mysql.sql
```

Done

Now you can start your seafile server.

Deploy Seafile with Apache

With Apache 2.4

Preparation

Load Modules

Edit httpd.conf

First edit your `httpd.conf` . Add the following lines to **the end of the file**:

```
LoadModule proxy_module modules/mod_proxy.so
LoadModule proxy_fcgi_module modules/mod_proxy_fcgi.so
LoadModule proxy_http_module modules/mod_proxy_http.so
LoadModule rewrite_module modules/mod_rewrite.so
Include conf/extra/httpd-vhosts.conf
```

And please ensure this line does NOT exist:

```
DocumentRoot "${SRVROOT}/htdocs"
```

Deploy Seahub/FileServer With Apache 2.4

Seahub is the web interface of Seafile server. FileServer is used to handle raw file uploading/downloading through browsers. By default, it listens on port 8082 for HTTP request.

Here we deploy Seahub using fastcgi, and deploy FileServer with reverse proxy. We assume you are running Seahub using domain "'www.myseafile.com'".

Edit your httpd-vhosts.conf

Modify Apache config file: (conf/extra/httpd-vhosts.conf)

Assume you have uncompresssed seafile server into `C:/seafile` .

If you need to use the IP address to access the seafile service directly.Please unconfigure the `<VirtualHost _default_:80>` section.

Then add the following lines:

```
<VirtualHost *:80>
    ServerName www.myseafile.com
    DocumentRoot "${SRVROOT}/htdocs"
    Alias /media  "C:/seafile/seafile-server-6.0.7/seahub/media"

    RewriteEngine On

    <Location /media>
        Require all granted
    </Location>

    #
    # seafile fileserver
    #
    ProxyPass /seafhttp http://127.0.0.1:8082
    ProxyPassReverse /seafhttp http://127.0.0.1:8082
    RewriteRule ^/seafhttp - [QSA,L]

    #
    # seahub
    #
    SetEnvIf Request_URI . proxy-fcgi-pathinfo=unescape
    SetEnvIf Authorization "(.*)" HTTP_AUTHORIZATION=$1
    ProxyPass / fcgi://127.0.0.1:8000/
</VirtualHost>
```

Modify seafile/seafile.conf

Modify the `seahub` section of `seafile/seafile.conf` :

```
[seahub]
port = 8000
fastcgi = true
```

Modify ccnet.conf and seahub_setting.py

Modify ccnet.conf

You need to modify the value of `SERVICE_URL` in ccnet.conf to let Seafile know the domain you choose. You can also modify SERVICE_URL via web UI in "System Admin->Settings". (**Warning**: if you set the value both via Web UI and ccnet.conf, the setting via Web UI will take precedence.)

```
SERVICE_URL = http://www.myseafile.com
```

Note: If you later change the domain assigned to seahub, you also need to change the value of `SERVICE_URL` .

Modify seahub_settings.py

You need to add a line in `seahub_settings.py` to set the value of `FILE_SERVER_ROOT` . You can also modify `FILE_SERVER_ROOT` via web UI in "System Admin->Settings". (**Warning**: if you set the value both via Web UI and seahub_settings.py, the setting via Web UI will take precedence.)

```
FILE_SERVER_ROOT = 'http://www.myseafile.com/seafhttp'
```

Please restart Seafile Server and httpd.

With Apache 2.2

Preparation

Install mod_fastcgi

Download [mod_fastcgi-*.dll] (http://fastcgi.com/dist/) first, and put it into the `modules/` directory of your Apache installation.

Note: You must download the right version of `mod_fastcgi` DLL according for your Apache. For example:

- If you are using Apache 2.2, you should download http://fastcgi.com/dist/mod_fastcgi-2.4.6-AP22.dll. The **AP22** part of the dll indicate it's for Apache **2.2**.
- If you are using Apache 2.0, you should download http://fastcgi.com/dist/old/mod_fastcgi-2.4.2-AP20.dll

Deploy Seahub/FileServer With Apache

Seahub is the web interface of Seafile server. FileServer is used to handle raw file uploading/downloading through browsers. By default, it listens on port 8082 for HTTP request.

Here we deploy Seahub using fastcgi, and deploy FileServer with reverse proxy. We assume you are running Seahub using domain '"www.myseafile.com"'.

Edit httpd.conf

First edit your `httpd.conf` . Add the following lines to **the end of the file**:

```
LoadModule fastcgi_module modules/mod_fastcgi-2.4.6-AP22.dll
LoadModule rewrite_module modules/mod_rewrite.so
LoadModule proxy_module modules/mod_proxy.so
LoadModule proxy_http_module modules/mod_proxy_http.so
Include conf/extra/httpd-vhosts.conf
```

Then add this line (substitute `YourDocumentRoot` with the value of your apache `DocumentRoot`)

```
FastCGIExternalServer "YourDocumentRoot/seahub.fcgi" -host 127.0.0.1:8000
```

Note, `seahub.fcgi` is just a placeholder, you don't need to actually have this file in your system.

Edit your httpd-vhosts.conf

Assume you have uncompresssed seafile server into `C:/SeafileProgram/seafile-pro-server-2.1.4` .

```
<VirtualHost *:80>
  ServerName www.myseafile.com
  Alias /media  "C:/SeafileProgram/seafile-pro-server-2.1.4/seahub/media"

  RewriteEngine On

  #
  # seafile fileserver
  #
  ProxyPass /seafhttp http://127.0.0.1:8082
  ProxyPassReverse /seafhttp http://127.0.0.1:8082
  RewriteRule ^/seafhttp - [QSA,L]

  #
  # seahub
  #
  RewriteRule ^/(media.*)$ /$1 [QSA,L,PT]
  RewriteCond %{REQUEST_FILENAME} !-f
  RewriteRule ^(.*)$ /seahub.fcgi$1 [QSA,L,E=HTTP_AUTHORIZATION:%{HTTP:Authorization}]
</VirtualHost>

<Directory "C:/SeafileProgram/seafile-pro-server-2.1.4/seahub/media">
    Options Indexes FollowSymLinks
    AllowOverride None
    Order allow,deny
    Allow from all
</Directory>
```

Modify Configurations

Modify ccnet.conf

You can also modify SERVICE_URL via web UI in "System Admin->Settings". (**Warning**: if you set the value both via Web UI and ccnet.conf, the setting via Web UI will take precedence.)

```
SERVICE_URL = http://www.myseafile.com
```

Note: If you later change the domain assigned to seahub, you also need to change the value of `SERVICE_URL` .

Modify seafile-data/seafile.conf

Modify the `seahub` section of `seafile-data/seafile.conf` :

```
[seahub]
port=8000
fastcgi=true
```

Modify seahub_settings.py

You need to add a line in `seahub_settings.py` to set the value of `FILE_SERVER_ROOT` . You can also modify `FILE_SERVER_ROOT` via web UI in "System Admin->Settings". (**Warning**: if you set the value both via Web UI and seahub_settings.py, the setting via Web UI will take precedence.)

```
FILE_SERVER_ROOT = 'http://www.myseafile.com/seafhttp'
```

Notes when Upgrading Seafile Server

When upgrading seafile server, besides the normal steps you should take, there is one extra step to do: '"Update the path of the static files in your apache configuration'". For example, assume your are upgrading seafile server 2.1.4 to 2.1.5, then:

```
<VirtualHost *:80>
  ...
  Alias /media  "C:/SeafileProgram/seafile-pro-server-2.1.5/seahub/media"
  ...
</VirtualHost>

<Directory "C:/SeafileProgram/seafile-pro-server-2.1.5/seahub/media">
  ...
</Directory>
```

Deploy Seafile with Nginx

Deploy Seahub/FileServer with Nginx

Seahub is the web interface of Seafile server. FileServer is used to handle raw file uploading/downloading through browsers. By default, it listens on port 8082 for HTTP request.

Here we deploy Seahub using fastcgi, and deploy FileServer with reverse proxy. We assume you are running Seahub using domain '"www.myseafile.com'".

This is a sample Nginx config file.

```
server {
    listen 80;
    server_name www.myseafile.com;

    proxy_set_header X-Forwarded-For $remote_addr;

    location / {
        fastcgi_pass    127.0.0.1:8000;
        fastcgi_param   SCRIPT_FILENAME     $document_root$fastcgi_script_name;
        fastcgi_param   PATH_INFO           $fastcgi_script_name;

        fastcgi_param    SERVER_PROTOCOL       $server_protocol;
        fastcgi_param   QUERY_STRING        $query_string;
        fastcgi_param   REQUEST_METHOD      $request_method;
        fastcgi_param   CONTENT_TYPE        $content_type;
        fastcgi_param   CONTENT_LENGTH      $content_length;
        fastcgi_param    SERVER_ADDR          $server_addr;
        fastcgi_param    SERVER_PORT          $server_port;
        fastcgi_param    SERVER_NAME          $server_name;
        fastcgi_param   REMOTE_ADDR         $remote_addr;

        access_log      logs/seahub.access.log;
        error_log       logs/seahub.error.log;
    }

    location /seafhttp {
        rewrite ^/seafhttp(.*)$ $1 break;
        proxy_pass http://127.0.0.1:8082;
        client_max_body_size 0;
    }

    location /media {
        root C:/SeafileProgram/seafile-pro-server-2.1.4/seahub;
    }
}
```

Modify Configurations

Modify ccnet.conf

You can also modify SERVICE_URL via web UI in "System Admin->Settings". (**Warning**: if you set the value both via Web UI and ccnet.conf, the setting via Web UI will take precedence.)

```
SERVICE_URL = http://www.myseafile.com
```

Note: If you later change the domain assigned to seahub, you also need to change the value of `SERVICE_URL` .

Modify seafile-data/seafile.conf

Modify the `seahub` section of `seafile-data/seafile.conf` :

```
[seahub]
port=8000
fastcgi=true
```

Modify seahub_settings.py

You need to add a line in `seahub_settings.py` to set the value of `FILE_SERVER_ROOT` . You can also modify `FILE_SERVER_ROOT` via web UI in "System Admin->Settings". (**Warning**: if you set the value both via Web UI and seahub_settings.py, the setting via Web UI will take precedence.)

```
FILE_SERVER_ROOT = 'http://www.myseafile.com/seafhttp'
```

Notes when Upgrading Seafile Server

When upgrading seafile server, besides the normal steps you should take, there is one extra step to do: '"Update the path of the static files in your nginx configuration"'. For example, assume your are upgrading seafile server 2.1.0 to 2.1.1, then:

```
location /media {
    root C:/SeafileProgram/seafile-pro-server-2.1.1/seahub;
}
```

Install Seafile Server as a Windows Service

Why you may want to install Seafile Server as a Windows service

- Seafile Server can keep on running after all users logout
- When system boots up, Seafile Server would start running even if no user has logged in

Install as a service

- Right click the tray icon, choose **Install as a Windows service**
- Choose `yes` in the propmted dialog

If the operation succeeds, A dialog would be prompted saying **Successully installed seafile service**.

Verify Seafile Server already running as a Windows service

- Logout the current user
- Visit seahub from another computer. If the seahub website can still be visited, Seafile server is already running as a Windows server

How to start the tray icon after installing as a service

If you have installed seafile server as a service, it would run automatically in the background the next time you boot your system. However, the tray icon would not appear automatically when a user logins in.

To start the tray icon, just doule click the `run.bat` file in the folder `C:\SeafileProgram\seafile-server-1.7.0` Uninstall Seafile Server Windows service

If you want to uninstall the Seafile Server service:

- Right click the tray icon, choose "Uninstall Windows service"
- Choose "yes" in the propmted dialog

Ports used by Seafile Windows Server

Seafile server has two components, so two TCP ports are used.

The two configuration files

All ports related configuration are recorded in `ccnet.conf` and `seafile.conf` .

How to open `ccnet.conf`

- Right click the seafile server trayicon, choose **Open seafile-server folder**
- Open the folder `ccnet` under `seafile-server` folder. The file `ccnet.conf` is there.

How to open `seafile.conf`

- Right click the seafile server trayicon, choose **Open seafile-server folder**
- Open the folder `seafile-data` under `seafile-server` folder. The file `seafile.conf` is there.

In the following section we list the TCP ports used by each of seafile components, as well as how to change them (For example, some port may have already been used by some other application).

Note: If you change any of the ports, you have to restart seafile server.

seafile fileserver

seafile fileserver handles raw file upload/download for Seahub

- default: 8082
- How to change: The Seafile desktop client will try to connect this port for file syncing. Don't change this port.

seahub

seahub is the web interface of seafile server.

Note: If you change the port of seahub, you need to change the `SERVICE_URL` in `ccnet.conf` .

- default: 8000

- How to change: Edit the file `seafile.conf` . Change the value of port under the seahub section. (This is added in Seafile Windows Server 1.7.0.1)

```
[seahub]
port=8000
```

- Edit the file `ccnet.conf` , modify the value of `SERVICE_URL` accordingly. For example, if you have changed the port to 8001, then modify the value of `SERVICE_URL` accordingly:

```
[General]
SERVICE_URL = <Your IP OR DOMAIN>:8001
```

Upgrading Seafile Windows Server

- Minor Upgrade
- Major Upgrade
- Upgrade Windows Service

Note：You must shutdown seafile server before you upgrade.

Uncompress the new version of Seafile Server

Before you upgrade, assume you have:

```
C:/SeafileProgram
            |_____  seafile-server-3.0.0/
```

Then the first step is to download the new version of Seafile Server and uncompress it to `C:/SeafileProgram` . After this you should have:

```
C:/SeafileProgram
            |_____  seafile-server-3.0.0/
            |_____  seafile-server-3.1.0/
```

Minor upgrade (like upgrade from 3.0.0 to 3.0.1)

Now assume you are upgrading from Seafile Windows Server 3.0.0 to 3.0.1

Move the contents of the avatars folder

Go to the folder `seafile-server-3.0.0/seahub/media/avatars`

The `avatars` folder contains all the avatars uploaded by seafile users.

If you have a user `foo@foo.com` , then in this folder, you will find a subfolder `foo@foo.com` . This subfolder contains the avatar pictures of the user `foo@foo.com` .

Copy all subfolders like `foo@foo.com` to `seafile-server-3.0.1/seahub/media/avatars` . So that when you start the new seafile 3.0.1 server, these avatars can be load correctly.

Major upgrade (like upgrade from 3.0.0 to 3.1.0)

Now assume you are upgrading from Seafile Windows Server 3.0.x to 3.1.y:

Run the major upgrade script

Run the database upgrade script

- Go to seafile-server-3.1.y/upgrade
- Right click the file `upgrade_3.0_3.1.bat`
- Choose "run as administrator"

If you're using MySQL, you need to manually upgrade the database yourself:

- Go to the folder seafile-server-3.1.y/upgrade/sql/3.1.0/mysql/
- If there are a file `ccnet.sql` , run it with the `ccnet-db` database

  ```
  mysql ccnet-db < ccnet.sql
  ```

- If there are a file `seafile.sql` , run it with the `seafile-db` database

  ```
  mysql ccnet-db < seafile.sql
  ```

- If there are a file `seahub.sql` , run it with the `seahub-db` database

  ```
  mysql seahub-db < seafile.sql
  ```

Copy avatars

Copy all subfolders of `seafile-server-3.0.0/seahub/media/avatars` to `seafile-server-3.1.0/seahub/media/avatars`

Upgrading Windows Service

If you have installed Seafile server as a Windows Service, you need to:

- Run the old version of seafile windows server, right click the tray icon, and choose uninstall windows service in the menu
- Exit the old version of seafile windows server
- Start the new version of seafile windows server, right click the tray icon, and choose install as windows service in the menu

Migrate From Windows to Linux

This tutorial show you how to migrate Seafile form Windows(using SQLite) to Linux.

1. Deploying Seafile Under Linux

First, you should Deploy Seafile with SQLite. And we assume that you deploy Seafile under `/home/haiwen/` directory.

2. Replace Config Files And Databases

Delete config files and databases in Linux

```
rm /home/haiwen/seahub_settings.py
rm /home/haiwen/seahub.db
rm -r /home/haiwen/seafile-data
cp /home/haiwen/ccnet/seafile.ini /home/haiwen/seafile.ini
rm -r /home/haiwen/ccnet
```

> Note: `seafile.ini` is used to record the path to `seafile-data` , we will use it later, so we just copy it out, not delete it.

Copy config files and databases to Linux

- copy file `seahub_settings.py` from Windows **seafile-server** to Linux `/home/haiwen/` ;

- copy file `seahub.db` from Windows **seafile-server** to Linux `/home/haiwen/` ;

- copy sub-directory `seafile-data` from Windows **seafile-server** to Linux `/home/haiwen/` ;

- copy sub-directory `ccnet` from Windows **seafile-server** to Linux `/home/haiwen/` ;

- copy `/home/haiwen/seafile.ini` to new Linux **ccnet** directory.

Start Seafile

```
./seafile.sh start
./seahub.sh start
```

Garbage Collecting Unused Blocks on Seafile Server

- Stop your seafile server by right clicking the server tray icon, and choose *Quit and shutdown Seafile Server*
- In file explorer, navigate to the seafile program folder `seafile-server-3.x.x`
- Right click the file **gc.bat**, and choose *Run with admin privileges*

The garbage collection program would run and remove all unused blocks.

Running seaf-fsck on corrupted repositories

For the time being there is no batch file available for running `seaf-fsck.exe` in a Windows environment. To manually run `seaf-fsck.exe` , follow the following procedure (assuming you've installed Seafile server to `X:\Seafile\` :

1. Open a command prompt by following *either* of these steps
   - Click **Start**, **Run**, enter `cmd.exe` and then navigate to the binary folder by entering

     `cd /d X:\Seafile\seafile-server-5.x.x\seafile\bin`
   - Or, using the file explorer:
     - Navigate to the folder where the binaries are located (`X:\Seafile\seafile-server-5.x.x\seafile\bin`)
     - Hold shift and right click in free space to bring up the context menu, then select **Open command window here**
2. Enter the following inside the opened command prompt: `seaf-fsck.exe --repair -c Y:\seafile-user\ccnet -d Y:\seafile-user\seafile-data -F Y:\seafile-user\conf`
   - *seafile-user* is the folder your Seafile data is stored in
   - Make sure you are pointing `seaf-fsck.exe` towards the correct directory: *ccnet*, *seafile-data* and *conf* folders must be present
3. `seaf-fsck` should be running now

For information on *seaf-fsck*, its usage and syntax, see the chapter Seafile FSCK.

Deploy Seafile Pro Edition

Install Seafile Pro Edition

- Method 1 (For Debian and CentOS 7): Deploy Seafile with an installation script. The installer offer a quick and easy way to set up a production ready Seafile Server using MariaDB, Memcached and NGINX as a reverse proxy in under 5 minutes.
- Method 2: Download and Setup Seafile Professional Server Step by Step

LDAP/AD Integration for Pro

- Configure LDAP in Seafile Pro
- Syncing Groups from LDAP/AD
- Syncing Roles from LDAP/AD

Migration and Upgrading

- Migrate from Seafile Community Server
- Upgrade Seafile Professional Server

S3/OpenSwift/Ceph Storage Backends

- Setup Seafile Professional Server With Amazon S3
- Setup Seafile Professional Server With OpenStack Swift
- Setup Seafile Professional Server With Ceph
- Migrate from File System to Ceph
- Storage Backend Encryption
- Data migration between different backends

Config Options

- Seafile Professional Server Configurable Options

Search

- Details about File Search

Online File Preview and Editing

- Enable Office/PDF Documents Online Preview
- Integrating with Office Online Server

Virus Scan

- Virus Scan
- Virus Scan With Kav4fs

ADFS Integration

- ADFS

Cluster

- Deploy seafile servers in a cluster
- Enable search and background tasks in a cluster
- Setup Seafile cluster with NFS
- Upgrade a cluster

Advanced User Management

- Multi-Institutions Support
- Roles and Permissions

Advanced Authentication

- Two-factor Authentication

Backup

- Real-time Backup Server

Admin Tools

- Import Directory to Seafile

License

- Seafile Professional Edition Software License Agreement

Download and Setup Seafile Professional Server

Preparation

The following document is tested with Ubuntu 14.04/16.04 and CentOS 7. We recommend to you use Ubuntu 16.04 or CentOS 7 for your server.

> NOTE:
>
> If you are using Ubuntu 14.04, you can use the following command to install all dependencies Seafile requires at one time.
>
> ```
> sudo apt-get install openjdk-7-jre poppler-utils libpython2.7 python-pip \
> mysql-server python-setuptools python-imaging python-mysqldb python-memcache pyth
> on-ldap \
> python-urllib3
>
> sudo pip install boto requests
> ```
>
> Ubuntu 16.04:
>
> ```
> sudo apt-get install openjdk-8-jre poppler-utils libpython2.7 python-pip \
> mysql-server python-setuptools python-imaging python-mysqldb python-memcache pyth
> on-ldap \
> python-urllib3
>
> sudo pip install boto requests
> sudo ln -sf /usr/lib/jvm/java-8-openjdk-amd64/jre/bin/java /usr/bin/
> ```
>
> CentOS 7:
>
> ```
> wget https://bootstrap.pypa.io/get-pip.py
> sudo python get-pip.py
> sudo yum install java-1.7.0-openjdk poppler-utils python-setuptools \
> python-imaging MySQL-python mariadb-server python-memcached python-ldap \
> python-urllib3
>
> sudo pip install boto requests
> sudo /etc/init.d/mysqld start
> ```
>
> For more information please see bellow.

Minimum System Requirements

- A Linux server with 2GB RAM

Install Java Runtime Environment (JRE)

On Ubuntu 14.04/Debian:

```
sudo apt-get install openjdk-7-jre
```

On Ubuntu 16.04:

```
sudo apt-get install openjdk-8-jre
sudo ln -sf /usr/lib/jvm/java-8-openjdk-amd64/jre/bin/java /usr/bin/
```

On CentOS/Red Hat:

```
sudo yum install java-1.7.0-openjdk
```

Install poppler-utils

The package poppler-utils is required for full text search of pdf files.

On Ubuntu/Debian:

```
sudo apt-get install poppler-utils
```

On CentOS/Red Hat:

```
sudo yum install poppler-utils
```

Install Python libraries

First make sure your have installed Python 2.7

```
sudo easy_install pip
sudo pip install boto
```

If you receive an error about "Wheel installs require setuptools >= ...", run this between the pip and boto lines above

```
sudo pip install setuptools --no-use-wheel --upgrade
```

Install libpython2.7 if you use Ubuntu 14.04

```
sudo apt-get install libpython2.7
```

Install all libraries required by the Community Edition

See Download and Setup Seafile Server With MySQL.

Download and Setup Seafile Professional Server

Get the license

Put the license you got under the top level diretory. In our wiki, we use the diretory `/data/haiwen/` as the top level directory. If you're using the free Pro Edition with three users you don't need a license file.

Download & uncompress Seafile Professional Server

```
tar xf seafile-pro-server_1.8.0_x86-64.tar.gz
```

Now you have:

```
haiwen
├── seafile-license.txt
└── seafile-pro-server-1.8.0/
```

You should notice the difference between the names of the Community Server and Professional Server. Take the 1.8.0 64bit version as an example:

- Seafile Community Server tarball is `seafile-server_1.8.0_x86-86.tar.gz` ; After uncompressing, the folder is `seafile-server-1.8.0`
- Seafile Professional Server tarball is `seafile-pro-server_1.8.0_x86-86.tar.gz` ; After uncompressing, the folder is `seafile-pro-server-1.8.0`

Setup

The setup process of Seafile Professional Server is the same as the Seafile Community Server. See Download and Setup Seafile Server With MySQL.

If you have any problem with setting up the service, please check Common problems in setting up Seafile server.

After you have succesfully setup Seafile Professional Server, you have a directory layout like this:

```
#tree haiwen -L 2
haiwen
├── seafile-license.txt # license file
├── ccnet              # configuration files
│   ├── mykey.peer
│   ├── PeerMgr
│   └── seafile.ini
├── conf
│   └── ccnet.conf
│   └── seafile.conf
│   └── seahub_settings.py
│   └── seafevents.conf
├── pro-data           # data specific for professional version
├── seafile-data
├── seafile-pro-server-1.8.0
│   ├── reset-admin.sh
│   ├── runtime
│   ├── seafile
│   ├── seafile.sh
│   ├── seahub
│   ├── seahub-extra
│   ├── seahub.sh
│   ├── setup-seafile.sh
│   ├── setup-seafile-mysql.py
│   ├── setup-seafile-mysql.sh
│   └── upgrade
├── seahub-data
│   └── avatars        # for user avatars
├── seahub.db
```

Performance turning

If you have more than 50 Seafile users, we highly recommend to add memcached. This is going to speedup Seahub (the web front end) significantly.

Done

At this point, the basic setup of Seafile Professional Server is done.

You may want to read more about Seafile Professional Server:

- FAQ For Seafile Professional Server

Migrate from Seafile Community Server

Restriction

It's quite likely you have deployed the Seafile Community Server and want to switch to the Professional Server, or vice versa. But there are some restrictions:

- You can only switch between Community Server and Professional Server of the same minor version.

That means, if you are using Community Server version 1.6, and want to switch to the Professional Server 1.7, you must first upgrade to Community Server version 1.7, and then follow the guides below to switch to the Professional Server 1.7. (The last tiny version number in 1.7.x is not important.)

Preparation

Install Java Runtime Environment (JRE)

Java 7 or higher is required.

On Ubuntu/Debian:

```
sudo apt-get install openjdk-7-jre
```

On CentOS/Red Hat:

```
sudo yum install java-1.7.0-openjdk
```

Note: Since version 3.1.12, java 1.7 is required, please check your java version by `java -version`. If not, please change the default java version.

Install poppler-utils

The package poppler-utils is required for full text search of pdf files.

On Ubuntu/Debian:

```
sudo apt-get install poppler-utils
```

On CentOS/Red Hat:

```
sudo yum install poppler-utils
```

Do the migration

We assume you already have deployed Seafile Community Server 1.8.0 under `/data/haiwen/seafile-server-1.8.0` .

Get the license

Put the license file you get under the top level directory of your Seafile installation. In our example, it is `/data/haiwen/` .

Download & uncompress Seafile Professional Server

You should uncompress the tarball to the top level directory of your installation, in our example it is `/data/haiwen` .

```
tar xf seafile-pro-server_1.8.0_x86-64.tar.gz
```

Now you have:

```
haiwen
├── seafile-license.txt
├── seafile-pro-server-1.8.0/
├── seafile-server-1.8.0/
├── ccnet/
├── seafile-data/
├── seahub-data/
├── seahub.db
└── seahub_settings.py
```

You should notice the difference between the names of the Community Server and Professional Server. Take the 1.8.0 64bit version as an example:

- Seafile Community Server tarball is `seafile-server_1.8.0_x86-86.tar.gz` ; After uncompressing, the folder is `seafile-server-1.8.0`
- Seafile Professional Server tarball is `seafile-pro-server_1.8.0_x86-86.tar.gz` ; After uncompressing, the folder is `seafile-pro-server-1.8.0`

Do the migration

- Stop Seafile Community Server if it's running

```
cd haiwen/seafile-server-1.8.0
./seafile.sh stop
./seahub.sh stop
```

- Run the migration script

```
cd haiwen/seafile-pro-server-1.8.0/
./pro/pro.py setup --migrate
```

The migration script is going to do the following for you:

- ensure your have all the prerequisites met
- create necessary extra configurations
- update the avatar directory
- create extra database tables

Now you have:

```
haiwen
├── seafile-license.txt
├── seafile-pro-server-1.8.0/
├── seafile-server-1.8.0/
├── ccnet/
├── seafile-data/
├── seahub-data/
├── seahub.db
├── seahub_settings.py
└── pro-data/
```

Start Seafile Professional Server

```
cd haiwen/seafile-pro-server-1.8.0
./seafile.sh start
./seahub.sh start
```

Switch Back to Community Server

- Stop Seafile Professional Server if it's running

```
cd haiwen/seafile-pro-server-1.8.0/
./seafile.sh stop
./seahub.sh stop
```

- Update the avatar directory link just like in Minor Upgrade

```
cd haiwen/seafile-server-1.8.0/
./upgrade/minor-upgrade.sh
```

- Start Seafile Community Server

```
cd haiwen/seafile-server-1.8.0/
./seafile.sh start
./seahub.sh start
```

Upgrading Seafile Professional Server

Upgrading Seafile Professional Server works like upgrading a Seafile Community Server

Configure Seafile Pro Edition to use LDAP

How does LDAP User Management works with Seafile

When Seafile is integrated with LDAP/AD, users in the system can be divided into two tiers:

- Users within Seafile's internal user database. Some attributes are attached to these users, such as whether it's a system admin user, whether it's activated. This tier includes two types of users:
  - Native users: these users are created by the admin on Seafile's system admin interface and are stored in the `EmailUser` table of the `ccnet` database.
  - Users imported from LDAP/AD server: When a user in LDAP/AD logs into Seafile, its information will be imported from LDAP/AD server into Seafile's database. These users are stored in the `LDAPUsers` table of the `ccnet` database.
- Users in LDAP/AD server. These are all the intended users of Seafile inside the LDAP server. Seafile doesn't manipulate these users directly. It has to import them into its internal database before setting attributes on them.

When Seafile counts the user number in the system, it only counts the **activated** users in its internal database.

When Seafile is integrated with LDAP/AD, it'll look up users from both the internal database and LDAP server. As long as the user exists in one of these two sources, he/she can log into the system.

Basic LDAP/AD Integration

The only requirement for Seafile to use LDAP/AD for authentication is that there must be a unique identifier for each user in the LDAP/AD server. Seafile can only use email-address-format user identifiers. So there are usually only two options for this unique identifier:

- Email address: this is the most common choice. Most organizations assign a unique email address for each member.
- UserPrincipalName: this is a user attribute only available in Active Directory. It's format is `user-login-name@domain-name`, e.g. `john@example.com`. It's not a real email address, but it works fine as the unique identifier.

Connecting to Active Directory

To use AD to authenticate a user, please add the following lines to ccnet.conf.

If you choose email address as unique identifier:

```
[LDAP]
HOST = ldap://192.168.1.123/
BASE = cn=users,dc=example,dc=com
USER_DN = administrator@example.local
PASSWORD = secret
LOGIN_ATTR = mail
```

If you choose UserPrincipalName as unique identifier:

```
[LDAP]
HOST = ldap://192.168.1.123/
BASE = cn=users,dc=example,dc=com
USER_DN = administrator@example.local
PASSWORD = secret
LOGIN_ATTR = userPrincipalName
```

Meaning of each config options:

- HOST: LDAP URL for the host. ldap://, ldaps:// and ldapi:// are supported. You can also include port number in the URL, like ldap://ldap.example.com:389. To use TLS, you should configure the LDAP server to listen on LDAPS port and specify ldaps:// here. More details about TLS are covered below.
- BASE: The root distinguished name (DN) to use when running queries against the directory server. **You cannot use the root DN (e.g. dc=example,dc=com) as BASE**.
- USER_DN: The distinguished name of the user that Seafile will use when connecting to the directory server. This user should have sufficient privileges to access all the nodes under BASE. It's recommended to use a user in the administrator group.
- PASSWORD: Password of the above user.
- LOGIN_ATTR: The attribute used for user's unique identifier. Use `mail` or `userPrincipalName`.

Tips for choosing BASE and USER_DN:

- To determine the BASE, you first have to navigate your organization hierachy on the domain controller GUI.
  - If you want to allow all users to use Seafile, you can use 'cn=users,dc=yourdomain,dc=com' as BASE (with proper adjustment for your own needs).
  - If you want to limit users to a certain OU (Organization Unit), you run `dsquery` command on the domain controller to find out the DN for this OU. For example, if the OU is 'staffs', you can run 'dsquery ou -name staff'. More information can be found here.
- AD supports 'user@domain.name' format for the USER_DN option. For example you can use administrator@example.com for USER_DN. Sometimes the domain controller

doesn't recognize this format. You can still use `dsquery` command to find out user's DN. For example, if the user name is 'seafileuser', run `dsquery user -name seafileuser`. More information [here](#).

Connecting to other LDAP servers

Please add the following options to ccnet.conf:

```
[LDAP]
HOST = ldap://192.168.1.123/
BASE = ou=users,dc=example,dc=com
USER_DN = cn=admin,dc=example,dc=com
PASSWORD = secret
LOGIN_ATTR = mail
```

The meaning of these options is the same as described in the previous section. With other LDAP servers, you can only use `mail` attribute as user's unique identifier.

Testing your LDAP Configuration

Since 5.0.0 Pro Edition, we provide a command line tool for checking your LDAP configuration.

To use this tool, make sure you have `python-ldap` package installed on your system.

```
sudo apt-get install python-ldap
```

Then you can run the test:

```
cd seafile-server-latest
./pro/pro.py ldapsync --test
```

The test script checks your LDAP settings under the `[LDAP]` section of ccnet.conf. If everything works, it'll print the first ten users of the search results. Otherwise, it'll print out possible errors in your config.

Setting Up LDAP/AD User Sync (optional)

In Seafile Pro, except for importing users into internal database when they log in, you can also configure Seafile to periodically sync user information from LDAP/AD server into the internal database.

- User's full name, department and contact email address can be synced to internal database. Users can use this information to more easily search for a specific user.

- User's Windows or Unix login id can be synced to the internal database. This allows the user to log in with its familiar login id.
- When a user is removed from LDAP/AD, the corresponding user in Seafile will be deactivated. Otherwise, he could still sync files with Seafile client or access the web interface.

After synchronization is complete, you can see the user's full name, department and contact email on its profile page.

Active Directory

If you're using Active Directory, add the following options to ccnet.conf:

```
[LDAP]
......

[LDAP_SYNC]
ENABLE_USER_SYNC = true
DEACTIVE_USER_IF_NOTFOUND = true
SYNC_INTERVAL = 60
USER_OBJECT_CLASS = person
ENABLE_EXTRA_USER_INFO_SYNC = true
FIRST_NAME_ATTR = givenName
LAST_NAME_ATTR = sn
DEPT_ATTR = department
UID_ATTR = sAMAccountName
ACTIVATE_USER_WHEN_IMPORT = true
```

Meaning of each options:

- **ENABLE_USER_SYNC**: set to "true" if you want to enable ldap user synchronization
- **DEACTIVE_USER_IF_NOTFOUND**: set to "true" if you want to deactivate a user when he/she was deleted in AD server.
- **SYNC_INTERVAL**: The interval to sync. Unit is minutes. Defaults to 60 minutes.
- **USER_OBJECT_CLASS**: This is the name of the class used to search for user objects. In Active Directory, it's usually "person". The default value is "person".
- **ENABLE_EXTRA_USER_INFO_SYNC**: Enable synchronization of additional user information, including user's full name, department, and Windows login name, etc.
- **FIRST_NAME_ATTR**: Attribute for user's first name. It's "givenName" by default.
- **LAST_NAME_ATTR**: Attribute for user's last name. It's "sn" by default.
- **USER_NAME_REVERSE**: In some languages, such as Chinese, the display order of the first and last name is reversed. Set this option if you need it.
- **DEPT_ATTR**: Attribute for user's department. It's "department" by default.
- **UID_ATTR**: Attribute for Windows login name. If this is synchronized, users can also log in with their Windows login name. In AD, the attribute `sAMAccountName` can be used as `UID_ATTR`.

If you choose `userPrincipalName` as the unique identifier for user, Seafile cannot use it as real email address to send notification emails to user. If the users in AD also have an email address attribute, you can sync these email addresses into Seafile's internal database. Seafile can then use them to send emails. The configuration option is:

- **CONTACT_EMAIL_ATTR**: usually you can set it to the `mail` attribute.
- **ACTIVATE_USER_WHEN_IMPORT**: Set to "false" if you don't want to activate the users when import.It's "true" by default.

Other LDAP servers

Add the following options to ccnet.conf:

```
[LDAP]
......

[LDAP_SYNC]
ENABLE_USER_SYNC = true
DEACTIVE_USER_IF_NOTFOUND = true
SYNC_INTERVAL = 60
USER_OBJECT_CLASS = userOfNames
ENABLE_EXTRA_USER_INFO_SYNC = true
FIRST_NAME_ATTR = givenName
LAST_NAME_ATTR = sn
DEPT_ATTR = department
UID_ATTR = uid
```

Meaning of each option:

- **ENABLE_USER_SYNC**: set to "true" if you want to enable ldap user synchronization
- **DEACTIVE_USER_IF_NOTFOUND**: set to "true" if you want to deactivate a user when he/she was deleted in LDAP server.
- **SYNC_INTERVAL**: The synchronization interval. Unit is minutes. Defaults to 60 minutes.
- **USER_OBJECT_CLASS**: This is the name of the class used to search for user objects. In OpenLDAP, you can use "userOfNames". The default value is "person".
- **ENABLE_EXTRA_USER_INFO_SYNC**: Enable synchronization of additional user information, including user's full name, department, and Windows/Unix login name, etc.
- **FIRST_NAME_ATTR**: Attribute for user's first name. It's "givenName" by default.
- **LAST_NAME_ATTR**: Attribute for user's last name. It's "sn" by default.
- **USER_NAME_REVERSE**: In some languages, such as Chinese, the display order of the first and last name is reversed. Set this option if you need it.
- **DEPT_ATTR**: Attribute for user's department. It's "department" by default.
- **UID_ATTR**: Attribute for Windows/Unix login name. If this is synchronized, users can also log in with their Windows/Unix login name. In OpenLDAP, the attribute `uid` or something similar can be used.

Manually Trigger Synchronization

To test your LDAP sync configuration, you can run the sync command manually.

To trigger LDAP sync manually,

```
cd seafile-server-lastest
./pro/pro.py ldapsync
```

Don't Import New Users in LDAP Sync

By default, when LDAP sync process detects that a new user is added in the LDAP server, it'll automatically sync that user into internal database. And the new users will be activated by default. This will consume one more user license.

Let's consider the following situation: you have a lot of users in the LDAP server, but you don't buy enough licenses to add all these users into Seafile. Enabling LDAP sync will consume all the licenses you buy and make your Seafile installation unusable. The ideal solution would be: new users are only added to Seafile when they log in for the first time. And LDAP sync only sync information from LDAP server for existing users. The following option is for this exact purpose:

```
[LDAP_SYNC]
IMPORT_NEW_USER = false
```

Advanced LDAP/AD Integration Options

Multiple BASE

Multiple base DN is useful when your company has more than one OUs to use Seafile. You can specify a list of base DN in the "BASE" config. The DNs are separated by ";", e.g.

```
ou=developers,dc=example,dc=com;ou=marketing,dc=example,dc=com
```

Additional Search Filter

Search filter is very useful when you have a large organization but only a portion of people want to use Seafile. The filter can be given by setting "FILTER" config. The value of this option follows standard LDAP search filter syntax (https://msdn.microsoft.com/en-us/library/aa746475(v=vs.85).aspx).

The final filter used for searching for users is `(&($LOGIN_ATTR=*)($FILTER))` . `$LOGIN_ATTR` and `$FILTER` will be replaced by your option values.

For example, add the following line to LDAP config:

```
FILTER = memberOf=CN=group,CN=developers,DC=example,DC=com
```

The final search filter would be `(&(mail=*) (memberOf=CN=group,CN=developers,DC=example,DC=com))`

Note that the cases in the above example is significant. The `memberOf` attribute is only available in Active Directory.

Limiting Seafile Users to a Group in Active Directory

You can use the FILTER option to limit user scope to a certain AD group.

1. First, you should find out the DN for the group. Again, we'll use `dsquery` command on the domain controller. For example, if group name is 'seafilegroup', run `dsquery group -name seafilegroup`.
2. Add following line to LDAP config:

```
FILTER = memberOf={output of dsquery command}
```

Using TLS connection to LDAP/AD server

To use TLS connection to the directory server, you should install a valid SSL certificate on the directory server.

The current version of Seafile Linux server package is compiled on CentOS. We include the ldap client library in the package to maintain compatibility with older Linux distributions. But since different Linux distributions have different path or configuration for OpenSSL library, sometimes Seafile is unable to connect to the directory server with TLS.

The ldap library (libldap) bundled in the Seafile package is of version 2.4. If your Linux distribution is new enough (like CentOS 6, Debian 7 or Ubuntu 12.04 or above), you can use system's libldap instead.

On Ubuntu 14.04 and Debian 7/8, moving the bundled ldap related libraries out of the library path should make TLS connection work.

```
cd ${SEAFILE_INSTALLATION_DIR}/seafile-server-latest/seafile/lib
mkdir disabled_libs_use_local_ones_instead
mv liblber-2.4.so.2 libldap-2.4.so.2 libsasl2.so.2 libldap_r-2.4.so.2 disabled_libs_use_local_ones_instead/
```

On CentOS 6, you have to move the libnssutil library:

```
cd ${SEAFILE_INSTALLATION_DIR}/seafile-server-latest/seafile/lib
mkdir disabled_libs_use_local_ones_instead
mv libnssutil3.so disabled_libs_use_local_ones_instead/
```

This effectively removes the bundled libraries from the library search path. When the server starts, it'll instead find and use the system libraries (if they are installed). This change has to be repeated after each update of the Seafile installation.

Use paged results extension

LDAP protocol version 3 supports "paged results" (PR) extension. When you have large number of users, this option can greatly improve the performance of listing users. Most directory server nowadays support this extension.

In Seafile Pro Edition, add this option to LDAP section of ccnet.conf to enable PR:

```
USE_PAGED_RESULT = true
```

Follow referrals

Starting from Pro Edition 4.0.4, Seafile supports auto following referrals in LDAP search. This is useful for partitioned LDAP or AD servers, where users may be spreaded on multiple directory servers. For more information about referrals, you can refer to this article.

To configure, add following option to ccnet.conf in the [LDAP] section:

```
FOLLOW_REFERRALS = true
```

Configure Multi-ldap Servers

Since seafile 5.1.4 pro edition, we support multi-ldap servers, that is besides base ldap server info in [LDAP] section, you can set other ldap servers info in [LDAP_MULTI_1], [LDAP_MULTI_2] ... [LDAP_MULTI_9] sections, so you can configure ten ldap servers to work with seafile. Multi-ldap servers mean when get or search ldap user, it will iterate all configured ldap servers until find pointed one; When get all ldap users, it will iterate all ldap servers to get all users; For Ldap sync it will sync all user/group info in all configured ldap servers to seafile.

For example I have configured base ldap server in `ccnet.conf` as follow:

```
[LDAP]
HOST = ldap://192.168.1.123/
BASE = ou=users,dc=example,dc=com
USER_DN = cn=admin,dc=example,dc=com
PASSWORD = secret
LOGIN_ATTR = mail
```

Then I can configure another ldap server in `ccnet.conf` as follow:

```
[LDAP_MULTI_1]
HOST = ldap://192.168.1.124/
BASE = ou=users,dc=example,dc=com
USER_DN = cn=admin,dc=example,dc=com
PASSWORD = secret
```

Note: All ldap servers share LOGIN_ATTR, USE_PAGED_RESULT, FOLLOW_REFERRALS attributes in [LDAP] section; For ldap user/group sync, all ldap servers share all ldap sync related attributes in [LDAP_SYNC] section.

Importing Groups from LDAP/AD

Since version 4.1.0, the Pro Edition supports importing (syncing) groups from LDAP or Active Directory.

How It Works

The importing or syncing process maps groups from LDAP directory server to groups in Seafile's internal database. This process is one-way.

- Any changes to groups in the database won't propagate back to LDAP;
- Any changes to groups in the database, except for "setting a member as group admin", will be overwritten in the next LDAP sync operation. If you want to add or delete members, you can only do that on LDAP server.
- The creator of imported groups will be set to the system admin.

Some LDAP servers, such as AD, allows setting a group as member of another group. This is called "nested group". Our process supports syncing nested groups. Supposed group B is a member of group A, the result would be: every member of group B will be imported as a member of both group A and group B.

There are two modes of operation:

- Periodical: the syncing process will be executed in a fixed interval
- Manual: there is a script you can run to trigger the syncing once

Prerequisite

You have to install python-ldap library in your system.

For Debian or Ubuntu

```
sudo apt-get install python-ldap
```

For CentOS or RedHat

```
sudo yum install python-ldap
```

Configuration

Before enabling LDAP group sync, you should have configured LDAP authentication. See Configure Seafile to use LDAP for details.

The following are LDAP group sync related options. They're in the "[LDAP_SYNC]" section of ccnet.conf.

- **ENABLE_GROUP_SYNC**: set to "true" if you want to enable ldap group syncing
- **SYNC_INTERVAL**: The interval to sync. Unit is minutes. Default to 60 minutes.
- **GROUP_OBJECT_CLASS**: This is the name of the class used to search for group objects. In Active Directory, it's usually "group"; in OpenLDAP or others, you may use "groupOfNames","groupOfUniqueNames" or "posixGroup", depends on your LDAP server. The default value is "group".
- **GROUP_FILTER**: An additional filter to use when searching group objects. If it's set, the final filter used to run search is "(&(objectClass=GROUP_OBJECT_CLASS) (GROUP_FILTER))"; otherwise the final filter would be " (objectClass=GROUP_OBJECT_CLASS)".
- **GROUP_MEMBER_ATTR**: The attribute field to use when loading the group's members. For most directory servers, the attributes is "member", which is the default value.For "posixGroup", it should be set to "memberUid".
- **USER_ATTR_IN_MEMBERUID**: The user attribute set in 'memberUid' option, which is used in "posixGroup".The default value is "uid".

The search base for groups is the "BASE_DN" set in "[LDAP]" section of ccnet.conf.

Here is an example configuration for Active Directory:

```
[LDAP]
HOST = ldap://192.168.1.123/
BASE = cn=users,dc=example,dc=com
USER_DN = administrator@example.local
PASSWORD = secret
LOGIN_ATTR = mail

[LDAP_SYNC]
ENABLE_GROUP_SYNC = true
SYNC_INTERVAL = 60
```

For AD, you usually don't need to configure other options except for "ENABLE_GROUP_SYNC". That's because the default values for other options are the usual values for AD. If you have special settings in your LDAP server, just set the corresponding options.

Here is an example configuration for OpenLDAP:

```
[LDAP]
HOST = ldap://192.168.1.123/
BASE = ou=users,dc=example,dc=com
USER_DN = cn=admin,dc=example,dc=com
PASSWORD = secret
LOGIN_ATTR = mail


[LDAP_SYNC]
ENABLE_GROUP_SYNC = true
SYNC_INTERVAL = 60
GROUP_OBJECT_CLASS = groupOfNames
```

NOTE Periodical sync won't happen immediately after you restart seafile server. It gets scheduled after the first sync interval. For example if you set sync interval to 30 minutes, the first auto sync will happen after 30 minutes you restarts. To sync immediately, you need to manually trigger it. This is covered in the next section.

After the sync is run, you should see log messages like the following in logs/seafevents.log. And you should be able to see the groups in system admin page.

```
[2015-03-30 18:15:05,109] [DEBUG] create group 1, and add dn pair CN=DnsUpdateProxy,CN
=Users,DC=Seafile,DC=local<->1 success.
[2015-03-30 18:15:05,145] [DEBUG] create group 2, and add dn pair CN=Domain Computers,
CN=Users,DC=Seafile,DC=local<->2 success.
[2015-03-30 18:15:05,154] [DEBUG] create group 3, and add dn pair CN=Domain Users,CN=U
sers,DC=Seafile,DC=local<->3 success.
[2015-03-30 18:15:05,164] [DEBUG] create group 4, and add dn pair CN=Domain Admins,CN=
Users,DC=Seafile,DC=local<->4 success.
[2015-03-30 18:15:05,176] [DEBUG] create group 5, and add dn pair CN=RAS and IAS Serve
rs,CN=Users,DC=Seafile,DC=local<->5 success.
[2015-03-30 18:15:05,186] [DEBUG] create group 6, and add dn pair CN=Enterprise Admins
,CN=Users,DC=Seafile,DC=local<->6 success.
[2015-03-30 18:15:05,197] [DEBUG] create group 7, and add dn pair CN=dev,CN=Users,DC=S
eafile,DC=local<->7 success.
```

Manually Trigger Syncing

To trigger LDAP sync manually,

```
cd seafile-server-lastest
./pro/pro.py ldapsync
```

Importing Roles from LDAP/AD

Since version 6.1.5, the Pro Edition supports syncing roles from LDAP or Active Directory.

To enable this feature, add config option `ROLE_NAME_ATTR` to ccnet.conf

```
[LDAP_SYNC]
ROLE_NAME_ATTR = title
```

`ROLE_NAME_ATTR` is the attribute field to configure roles in LDAP . We provide a user-defined function to map the role：Create `custom_functions.py` under conf/ and edit it like:

```
#coding=utf-8
import sys
reload(sys)
sys.setdefaultencoding('utf8')

def ldap_role_mapping(role):
    if 'staff' in role:
        return 'Staff'
    if 'guest' in role:
        return 'Guest'
    if 'manager' in role:
        return 'Manager'
```

you can rewrite this function (in python) to make your own mapping rules. If the file or function doesn't exist, all roles in `ROLE_NAME_ATTR` will be synced.

NOTE: Make sure that ccnet-server keeps running while doing LDAP role sync.

Requirements

To use ADFS to log in to your Seafile, you need the following components:

1. A Winodws Server with ADFS installed. For configuring and installing ADFS you can see this article.

2. A valid SSL certificate for ADFS server, and here we use **adfs-server.adfs.com** as the domain name example.

3. A valid SSL certificate for Seafile server, and here we use **demo.seafile.com** as the domain name example.

Prepare Certs File

1. x.509 certs for SP (Service Provider)

   You can generate them by:

   ```
   openssl req -x509 -nodes -days 365 -newkey rsa:2048 -keyout sp.key -out sp.crt
   ```

   These x.509 certs are used to sign and encrypt elements like NameID and Metadata for SAML.

   Then copy these two files to **/seahub-data/certs**. (if the certs folder not exists, create it.)

2. x.509 cert from IdP (Identity Provider)

   i. Log into the ADFS server and open the ADFS management.

   ii. Double click **Service** and choose **Certificates**.

   iii. Export the **Token-Signing** certificate:

       i. Right-click the certificate and select **View Certificate**.
       ii. Select the **Details** tab.
       iii. Click **Copy to File** (select **DER encoded binary X.509**).

   iv. Convert this certificate to PEM format, rename it to **idp.crt**

   v. Then copy it to **/seahub-data/certs**.

Prepare IdP Metadata File

1. Open https://adfs-server.adfs.com/federationmetadata/2007-06/federationmetadata.xml

2. Save this xml file, rename it to **idp_federation_metadata.xml**

3. Copy it to **/seahub-data/certs**.

Install Requirements on Seafile Server

- For Ubuntu 16.04

```
sudo apt install libxmlsec1
sudo pip install cryptography djangosaml2
```

Config Seafile

Add the following lines to **seahub_settings.py**

```python
from os import path
import saml2
import saml2.saml


CERTS_DIR = '<seafile-install-path>/seahub-data/certs'
SP_SERVICE_URL = 'https://demo.seafile.com'
XMLSEC_BINARY = '/usr/local/bin/xmlsec1'
ATTRIBUTE_MAP_DIR = '<seafile-install-path>/seafile-server-latest/seahub-extra/seahub_
extra/adfs_auth/attribute-maps'
SAML_ATTRIBUTE_MAPPING = {
    'DisplayName': ('display_name', ),
    'ContactEmail': ('contact_email', ),
    'Deparment': ('department', ),
    'Telephone': ('telephone', ),
}


ENABLE_ADFS_LOGIN = True
EXTRA_AUTHENTICATION_BACKENDS = (
    'seahub_extra.adfs_auth.backends.Saml2Backend',
)
SAML_USE_NAME_ID_AS_USERNAME = True
LOGIN_REDIRECT_URL = '/saml2/complete/'
SAML_CONFIG = {
    # full path to the xmlsec1 binary programm
    'xmlsec_binary': XMLSEC_BINARY,

    'allow_unknown_attributes': True,

    # your entity id, usually your subdomain plus the url to the metadata view
    'entityid': SP_SERVICE_URL + '/saml2/metadata/',

    # directory with attribute mapping
    'attribute_map_dir': ATTRIBUTE_MAP_DIR,

    # this block states what services we provide
    'service': {
        # we are just a lonely SP
        'sp' : {
            "allow_unsolicited": True,
```

```
                'name': 'Federated Seafile Service',
                'name_id_format': saml2.saml.NAMEID_FORMAT_EMAILADDRESS,
                'endpoints': {
                    # url and binding to the assetion consumer service view
                    # do not change the binding or service name
                    'assertion_consumer_service': [
                        (SP_SERVICE_URL + '/saml2/acs/',
                         saml2.BINDING_HTTP_POST),
                    ],
                    # url and binding to the single logout service view
                    # do not change the binding or service name
                    'single_logout_service': [
                        (SP_SERVICE_URL + '/saml2/ls/',
                         saml2.BINDING_HTTP_REDIRECT),
                        (SP_SERVICE_URL + '/saml2/ls/post',
                         saml2.BINDING_HTTP_POST),
                    ],
                },

                # attributes that this project need to identify a user
                'required_attributes': ["uid"],

                # attributes that may be useful to have but not required
                'optional_attributes': ['eduPersonAffiliation', ],

                # in this section the list of IdPs we talk to are defined
                'idp': {
                    # we do not need a WAYF service since there is
                    # only an IdP defined here. This IdP should be
                    # present in our metadata

                    # the keys of this dictionary are entity ids
                    'https://adfs-server.adfs.com/federationmetadata/2007-06/federationmet
adata.xml': {
                        'single_sign_on_service': {
                            saml2.BINDING_HTTP_REDIRECT: 'https://adfs-server.adfs.com/adf
s/ls/idpinitiatedsignon.aspx',
                        },
                        'single_logout_service': {
                            saml2.BINDING_HTTP_REDIRECT: 'https://adfs-server.adfs.com/adfs/
ls/?wa=wsignout1.0',
                        },
                    },
                },
            },
        },

        # where the remote metadata is stored
        'metadata': {
            'local': [path.join(CERTS_DIR, 'idp_federation_metadata.xml')],
        },

        # set to 1 to output debugging information
        'debug': 1,

        # Signing
```

```
    'key_file': '',
    'cert_file': path.join(CERTS_DIR, 'certs/idp.crt'),  # from IdP

    # Encryption
    'encryption_keypairs': [{
        'key_file': path.join(CERTS_DIR, 'certs/sp.key'),  # private part
        'cert_file': path.join(CERTS_DIR, 'certs/sp.crt'),  # public part
    }],

    'valid_for': 24,  # how long is our metadata valid
}
```

Config ADFS Server

1. Add **Relying Party Trust**

   Relying Party Trust is the connection between Seafile and ADFS.

   i.   Log into the ADFS server and open the ADFS management.

   ii. Double click **Trust Relationships**, then right click **Relying Party Trusts**, select
        Add Relying Party Trust….

   iii. Select **Import data about the relying party published online or one a local
        network**, input `https://demo.seafile.com/saml2/metadata/` in the **Federation
        metadata address**.

   iv. Then **Next** until **Finish**.

2. Add **Relying Party Claim Rules**

   Relying Party Claim Rules is used for attribute communication between Seafile and
   users in Windows Domain.

   Important: Users in Windows domain must have the **E-mail** value setted.

   i.   Right-click on the relying party trust and select **Edit Claim Rules...**

   ii.   On the Issuance Transform Rules tab select **Add Rules...**

   iii. Select **Send LDAP Attribute as Claims** as the claim rule template to use.

   iv.   Give the claim a name such as LDAP Attributes.

   v.   Set the Attribute Store to **Active Directory**, the LDAP Attribute to **E-Mail-
         Addresses**, and the Outgoing Claim Type to **E-mail Address**.

   vi.   Select **Finish**.

   vii. Click **Add Rule...** again.

   viii. Select **Transform an Incoming Claim**.

ix. Give it a name such as **Email to Name ID**.

x. Incoming claim type should be **E-mail Address** (it must match the Outgoing Claim Type in rule #1).

xi. The Outgoing claim type is **Name ID** (this is requested in Seafile settings policy `'name_id_format': saml2.saml.NAMEID_FORMAT_EMAILADDRESS`).

xii. the Outgoing name ID format is **Email**.

xiii. **Pass through all claim values** and click **Finish**.

Test

After re-starting the services, you may open a web browser and type in `https://demo.seafile.com` , there should be a `ADFS` button in login dialog, click that button will redirect you to the ADFS server (adfs-server.adfs.com), if username and password are correct, you will be redirect back to Seafile home page.

For descktop client, simply click "Shibboleth Login" in "Add a new account" window, type in `https://demo.seafile.com` , click OK button will open a new window display ADFS server login page, if username and password are correct, the window will be closed and show Seafile libraries panel.

- https://support.zendesk.com/hc/en-us/articles/203663886-Setting-up-single-sign-on-using-Active-Directory-with-ADFS-and-SAML-Plus-and-Enterprise-

- http://wiki.servicenow.com/?title=Configuring_ADFS_2.0_to_Communicate_with_SAML_2.0#gsc.tab=0

- https://github.com/rohe/pysaml2/blob/master/src/saml2/saml.py

Seafile Professional Server supports previewing office/pdf documents online by converting them to HTML pages. You can follow these steps to use the feature. If you'd like to edit office files online, you can integrate Seafile with Microsoft Office Online server, LibreOffice online or OnlyOffice.

Install Libreoffice/UNO

Libreoffice 4.1+ and Python-uno library are required to enable office files online preview.

On Ubuntu/Debian:

```
sudo apt-get install libreoffice libreoffice-script-provider-python
```

> For older version of Ubuntu: `sudo apt-get install libreoffice python-uno`

On Centos/RHEL:

```
sudo yum install libreoffice libreoffice-headless libreoffice-pyuno
```

For other Linux distributions: Installation of LibreOffice on Linux

Also, you may need to install fonts for your language, especially for Asians, otherwise the office/pdf document may not display correctly.

For example, Chinese users may wish to install the WenQuanYi series of truetype fonts:

```
# For ubuntu/debian
sudo apt-get install ttf-wqy-microhei ttf-wqy-zenhei xfonts-wqy
```

Install poppler-utils

The package poppler-utils is also required.

On Ubuntu/Debian:

```
sudo apt-get install poppler-utils
```

On CentOS/Red Hat:

```
sudo yum install poppler-utils
```

Enable Office Preview

1. Open file `seafevents.conf` , in the `OFFICE CONVERTER` section:

```
[OFFICE CONVERTER]
enabled = true
```

2. After modifying and saving `seafevents.conf` , restart seafile server by `./seafile.sh restart`

3. Open a doc/ppt/xls/pdf file on seahub, you should be about the previewing it in your browser.

Other Configurable Options

Here are full list of options you can fine tune:

```
[OFFICE CONVERTER]

## must be "true" to enable office/pdf file online preview
enabled = true


## How many libreoffice worker processes to run concurrenlty
workers = 1


## where to store the converted office/pdf files. Deafult is /tmp/.
outputdir = /tmp/


## how many pages are allowed to be previewed online. Default is 50 pages
max-pages = 50


## the max size of documents to allow to be previewed online, in MB. Default is 2 MB
## Preview a large file (for example >30M) online will freeze the browser.
max-size = 2
```

FAQ about Office/PDF document preview

- Document preview doesn't work, where to find more information?

  You can check the log at logs/seafevents.log

- My server is CentOS, and I see errors like "/usr/lib64/libreoffice/program/soffice.bin X11 error: Can't open display", how could I fix it?

  This error indicates you have not installed the `libreoffice-headless` package. Install it by `"sudo yum install libreoffice-headless"` .

- How can I change max size and max pages of documents that can be previewed online ?

  1. Locate the `OFFICE CONVERTER` section in `seafevents.conf` .
  2. Append following lines to the section

```
# the max size of documents to allow to be previewed online, in MB. Default i
s 2 MB
max-size = 2
# how many pages are allowed to be previewed online. Default is 50 pages
max-pages = 50
```

Then, restart seafile server

```
cd /data/haiwen/seafile-server-latest/
./seafile.sh restart
./seahub.sh restart
```

- Document preview doesn't work on my Ubuntu/Debian server, what can I do?

Current office online preview works with libreoffice 4.0-4.2. If the version of libreoffice installed by `apt-get` is too old or too new, you can solve this by:

Remove the installed libreoffice:

```
sudo apt-get remove libreoffice* python-uno python3-uno
```

Download libreoffice packages from libreoffice official site

Install the downloaded pacakges:

```
tar xf LibreOffice_4.1.6_Linux_x86-64_deb.tar.gz
cd LibreOffice_4.1.6.2_Linux_x86-64_deb
cd DEBS
sudo dpkg -i *.deb
```

Restart your seafile server and try again. It should work now.

```
./seafile.sh restart
```

- The browser displays "document conversion failed", and in the logs I see messages like `[WARNING] failed to convert xxx to ...` , what should I do?

  Sometimes the libreoffice process need to be restarted, especially if it's the first time seafile server is running on the server.

  Try to kill the libreoffice process:

  ```
  pkill -f soffice.bin
  ```

  Now try re-opening the preview page in the brower again.

Also if you are deploying seafile in cluster mode, make sure memcached is working on each server.

- The above solution does not solve my problem.

Please check whether the user you run Seafile can correctly start the libreoffice process. There may be permission problems. For example, if you use www-data user to run Seafile, make sure www-data has a home directory and can write to the home directory.

Office Online Server

In Seafile Professional Server Version 4.4.0 (or above), you can use Microsoft Office Online Server (formerly named Office Web Apps) to preview documents online. Office Online Server provides the best preview for all Office format files. It also support collaborative editing of Office files directly in the web browser. For organizations with Microsoft Office Volume License, it's free to use Office Online Server. For more information about Office Online Server and how to deploy it, please refer to https://technet.microsoft.com/en-us/library/jj219455(v=office.16).aspx.

Seafile's own Office file preview is still the default. To use Office Online Server for preview, please add following config option to seahub_settings.py.

```python
# Enable Office Online Server
ENABLE_OFFICE_WEB_APP = True


# Url of Office Online Server's discovery page
# The discovery page tells Seafile how to interact with Office Online Server when view
 file online
# You should change `http://example.office-web-app.com` to your actual Office Online S
erver server address
OFFICE_WEB_APP_BASE_URL = 'http://example.office-web-app.com/hosting/discovery'


# Expiration of WOPI access token
# WOPI access token is a string used by Seafile to determine the file's
# identity and permissions when use Office Online Server view it online
# And for security reason, this token should expire after a set time period
WOPI_ACCESS_TOKEN_EXPIRATION = 30 * 60 # seconds


# List of file formats that you want to view through Office Online Server
# You can change this value according to your preferences
# And of course you should make sure your Office Online Server supports to preview
# the files with the specified extensions
OFFICE_WEB_APP_FILE_EXTENSION = ('ods', 'xls', 'xlsb', 'xlsm', 'xlsx','ppsx', 'ppt',
    'pptm', 'pptx', 'doc', 'docm', 'docx')


# Enable edit files through Office Online Server
ENABLE_OFFICE_WEB_APP_EDIT = True


# types of files should be editable through Office Online Server
# Note, Office Online Server 2016 is needed for editing docx
OFFICE_WEB_APP_EDIT_FILE_EXTENSION = ('xlsx', 'pptx', 'docx')



# HTTPS authentication related (optional)

# Server certificates
# Path to a CA_BUNDLE file or directory with certificates of trusted CAs
# NOTE: If set this setting to a directory, the directory must have been processed usi
ng the c_rehash utility supplied with OpenSSL.
OFFICE_WEB_APP_SERVER_CA = '/path/to/certfile'



# Client certificates
# You can specify a single file (containing the private key and the certificate) to us
e as client side certificate
OFFICE_WEB_APP_CLIENT_PEM = 'path/to/client.pem'

# or you can specify these two file path to use as client side certificate
OFFICE_WEB_APP_CLIENT_CERT = 'path/to/client.cert'
OFFICE_WEB_APP_CLIENT_KEY = 'path/to/client.key'
```
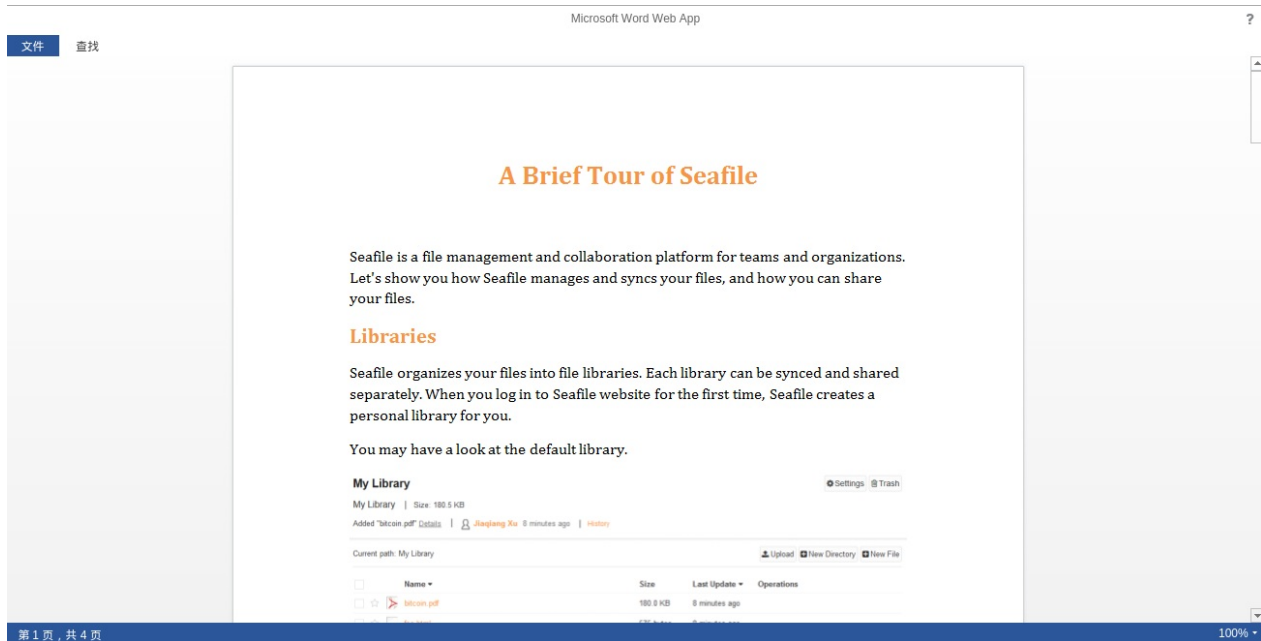
Then restart

```
./seafile.sh restart
./seahub.sh restart
```

After you click the document you specified in seahub_settings.py, you will see the new preview page.

Trouble shooting

Understanding how the web app integration works is going to help you debugging the problem. When a user visits a file page:

1. (seahub->browser) Seahub will generate a page containing an iframe and send it to the browser
2. (browser->office online server) With the iframe, the browser will try to load the file preview page from the office online server
3. (office online server->seahub) office online server receives the request and sends a request to Seahub to get the file content
4. (office online server->browser) office online server sends the file preview page to the browser.

Please check the Nginx log for Seahub (for step 3) and Office Online Server to see which step is wrong.

Notes on Windows paging files

You should make sure you have configured at least a few GB of paging files in your Windows system. Otherwise the IIS worker processes may die randomly when handling Office Online requests.

Details about File Search

Note: Since Seafile Professional Server 5.0.0, all config files are moved to the central **conf** folder. Read More.

Search Options

The following options can be set in **seafevents.conf** to control the behaviors of file search. You need to restart seafile and seahub to make them take effect.

```
[INDEX FILES]
## must be "true" to enable search
enabled = true

## The interval the search index is updated. Can be s(seconds), m(minutes), h(hours),
d(days)
interval=10m

## If true, indexes the contents of office/pdf files while updating search index
## Note: If you change this option from "false" to "true", then you need to clear the
search index and update the index again.
index_office_pdf=false
```

Enable full text search for Office/PDF files

Full text search is not enabled by default to save system resources. If you want to enable it, you need to follow the instructions below.

First you have to set the value of `index_office_pdf` option in `seafevents.conf` to `true` .

Then restart seafile server

```
cd /data/haiwen/seafile-pro-server-1.7.0/
./seafile.sh restart
```

You need to delete the existing search index and recreate it.

```
./pro/pro.py search --clear
./pro/pro.py search --update
```

Use existing ElasticSearch server

The search module uses an Elasticsearch server bundled with the Seafile Professional Server. However, you may have an existing Elasticsearch server or cluster running in your company. In this situation, you can change the config file to use your existing ES server or cluster.

This feature was added in Seafile Professional Server 2.0.5.

Modify the config file

- Edit `seafevents.conf`, add settings in the section **[INDEX FILES]** to specify your ES server host and port:

```
[INDEX FILES]
...
external_es_server = true
es_host = 192.168.1.101
es_port = 9300
```

- `external_es_server` : set to `true` so seafile would not start its own elasticsearch server
- `es_host` : The ip address of your ES server
- `es_port` : The listening port of ES server RESTful API. By default it should be `9200`

Common problems

How to rebuild the index if something went wrong

You can rebuild search index by running:

```
./pro/pro.py search --clear
./pro/pro.py search --update
```

If this does not work, you can try the following steps:

1. Stop Seafile
2. Remove the old search index `rm -rf pro-data/search`
3. Restart Seafile
4. Wait one minute then run `./pro/pro.py search --update`

I get no result when I search a keyword

The search index is updated every 10 minutes by default. So before the first index update is performed, you get nothing no matter what you search.

To be able to search immediately,

- Make sure you have started Seafile Server
- Update the search index manually:

```
cd haiwen/seafile-pro-server-2.0.4
./pro/pro.py search --update
```

Encrypted files cannot be searched

This is because the server cannot index encrypted files, since they are encrypted.

Increase the heap size for the java search process

The search functionality is based on elasticsearch, which is a java process. To increase the java heap size, you can use the `ES_HEAP_SIZE` environment variable, e.g.:

```
export ES_HEAP_SIZE=4g # default is 1g
./seafile.sh restart
```

Virus Scan

Note: Since Seafile Server 5.0.0, all config files are moved to the central **conf** folder. Read More.

In Seafile Professional Server 4.4.0 (or above), Seafile can scan uploaded files for malicious content in the background. When configured to run periodically, the scan process scans all existing libraries on the server. In each scan, the process only scans newly uploaded/updated files since the last scan. For each file, the process executes a user-specified virus scan command to check whether the file is a virus or not. Most anti-virus programs provide command line utility for Linux.

To enable this feature, add the following options to `seafile.conf` :

```
[virus_scan]
scan_command = (command for checking virus)
virus_code = (command exit codes when file is virus)
nonvirus_code = (command exit codes when file is not virus)
scan_interval = (scanning interval, in unit of minutes, default to 60 minutes)
```

More details about the options:

- On Linux/Unix, most virus scan commands returns specific exit codes for virus and non-virus. You should consult the manual of your anti-virus program for more information.
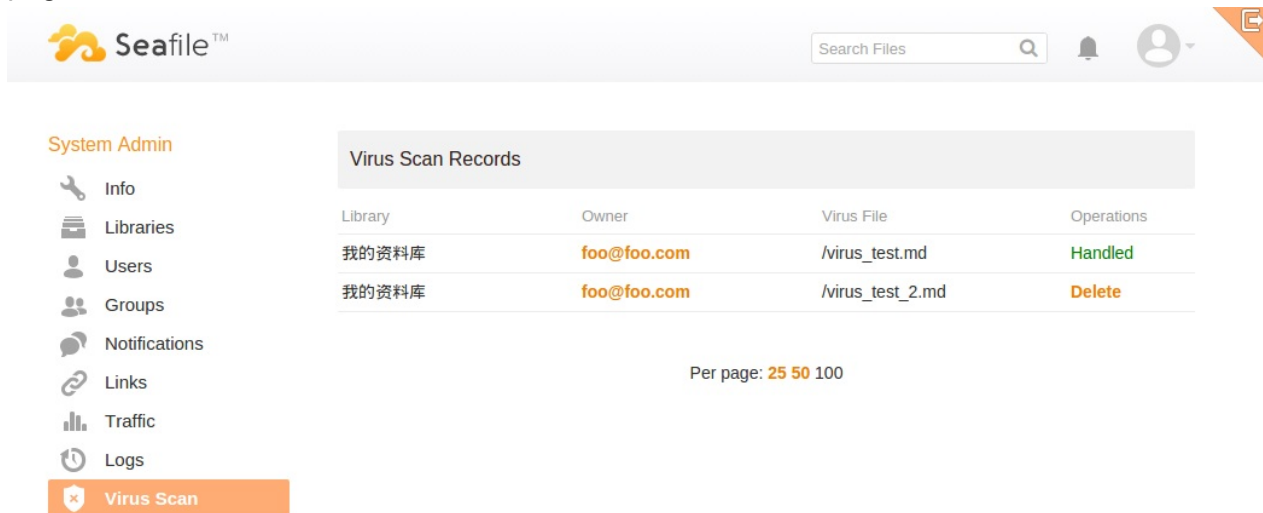
An example for ClamAV (http://www.clamav.net/) is provided below:

```
[virus_scan]
scan_command = clamscan
virus_code = 1
nonvirus_code = 0
```

To test whether your configuration works, you can trigger a scan manually:

```
cd seafile-server-latest
./pro/pro.py virus_scan
```

If a virus was detected, you can see scan records and delete infected files on the Virus Scan page in the admin area.

Since Pro edition 6.0.0, a few more options are added to provide finer grained control for virus scan.

```
[virus_scan]
......
scan_size_limit = (size limit for files to be scanned)
scan_skip_ext = (a comma (',') separated list of file extensions to be ignored)
threads = (number of concurrent threads for scan, one thread for one file, default to
4)
```

The file extensions should start with '.'. The extensions are case insensitive. By default, files with following extensions will be ignored:

```
.bmp, .gif, .ico, .png, .jpg, .mp3, .mp4, .wav, .avi, .rmvb, .mkv
```

The list you provide will override default list.

Virus Scan with kav4fs

Prerequisite

Assume you have installed Kaspersky Anti-Virus for Linux File Server on the Seafile Server machine.

If the user that runs Seafile Server is not root, it should have sudoers privilege to avoid writing password when running kav4fs-control. Add following content to /etc/sudoers:

```
<user of running seafile server>     ALL=(ALL:ALL) ALL
<user of running seafile server> ALL=NOPASSWD: /opt/kaspersky/kav4fs/bin/kav4fs-contro
l
```

Script

As the return code of kav4fs cannot reflect the file scan result, we use a shell wrapper script to parse the scan output and based on the parse result to return different return codes to reflect the scan result.

Save following contents to a file such as `kav4fs_scan.sh` :

Virus Scan With Kav4fs

```bash
#!/bin/bash

TEMP_LOG_FILE=`mktemp /tmp/XXXXXXXXXX`
VIRUS_FOUND=1
CLEAN=0
UNDEFINED=2
KAV4FS='/opt/kaspersky/kav4fs/bin/kav4fs-control'
if [ ! -x $KAV4FS ]
then
    echo "Binary not executable"
    exit $UNDEFINED
fi

sudo $KAV4FS --scan-file "$1" > $TEMP_LOG_FILE
if [ "$?" -ne 0 ]
then
    echo "Error due to check file '$1'"
    exit 3
fi
THREATS_C=`grep 'Threats found:' $TEMP_LOG_FILE|cut -d':' -f 2|sed 's/ //g'`
RISKWARE_C=`grep 'Riskware found:' $TEMP_LOG_FILE|cut -d':' -f 2|sed 's/ //g'`
INFECTED=`grep 'Infected:' $TEMP_LOG_FILE|cut -d':' -f 2|sed 's/ //g'`
SUSPICIOUS=`grep 'Suspicious:' $TEMP_LOG_FILE|cut -d':' -f 2|sed 's/ //g'`
SCAN_ERRORS_C=`grep 'Scan errors:' $TEMP_LOG_FILE|cut -d':' -f 2|sed 's/ //g'`
PASSWORD_PROTECTED=`grep 'Password protected:' $TEMP_LOG_FILE|cut -d':' -f 2|sed 's/ /
/g'`
CORRUPTED=`grep 'Corrupted:' $TEMP_LOG_FILE|cut -d':' -f 2|sed 's/ //g'`

rm -f $TEMP_LOG_FILE

if [ $THREATS_C -gt 0 -o $RISKWARE_C -gt 0 -o $INFECTED -gt 0 -o $SUSPICIOUS -gt 0 ]
then
    exit $VIRUS_FOUND
elif [ $SCAN_ERRORS_C -gt 0 -o $PASSWORD_PROTECTED -gt 0 -o $CORRUPTED -gt 0 ]
then
    exit $UNDEFINED
else
    exit $CLEAN
fi
```

Grant execute permissions for the script (make sure it is owned by the user Seafile is running as):

```
chmod u+x kav4fs_scan.sh
```

The meaning of the script return code:

```
1: found virus
0: no virus
other: scan failed
```

Configuration

Add following content to `seafile.conf` :

```
[virus_scan]
scan_command = <absolute path of kav4fs_scan.sh>
virus_code = 1
nonvirus_code = 0
scan_interval = <scanning interval, in unit of minutes, default to 60 minutes>
```

Setup With Amazon S3

Note: Since Seafile Server 5.0.0, all config files are moved to the central **conf** folder. Read More.

Prepare

To setup Seafile Professional Server with Amazon S3:

- Setup the basic Seafile Professional Server following the guide on Download and setup Seafile Professional Server
- Install the python `boto` library. It's needed to access S3 service.

  ```
  sudo easy_install boto
  ```

- Install and configure memcached. For best performance, Seafile requires install memcached and enable memcache for objects. We recommend to allocate 128MB memory for memcached. Edit /etc/memcached.conf

```
# Start with a cap of 64 megs of memory. It's reasonable, and the daemon default
# Note that the daemon will grow to this size, but does not start out holding this muc
h
# memory
# -m 64
-m 128
```

Modify Seafile.conf

Edit `seafile.conf` , add the following lines:

```
[commit_object_backend]
name = s3
# bucket name can only use lowercase characters, numbers, periods and dashes. Period c
annot be used in Frankfurt region.
bucket = my-commit-objects
key_id = your-key-id
key = your-secret-key
memcached_options = --SERVER=localhost --POOL-MIN=10 --POOL-MAX=100


[fs_object_backend]
name = s3
# bucket name can only use lowercase characters, numbers, periods and dashes. Period c
annot be used in Frankfurt region.
bucket = my-fs-objects
key_id = your-key-id
key = your-secret-key
memcached_options = --SERVER=localhost --POOL-MIN=10 --POOL-MAX=100


[block_backend]
name = s3
# bucket name can only use lowercase characters, numbers, periods and dashes. Period c
annot be used in Frankfurt region.
bucket = my-block-objects
key_id = your-key-id
key = your-secret-key
memcached_options = --SERVER=localhost --POOL-MIN=10 --POOL-MAX=100
```

It's recommended to create separate buckets for commit, fs, and block objects. The key_id and key are required to authenticate you to S3. You can find the key_id and key in the "security credentials" section on your AWS account page.

When creating your buckets on S3, please first read S3 bucket naming rules. Note especially not to use **UPPERCASE** letters in bucket names (don't use camel style names, such as MyCommitOjbects).

Use S3 in newer regions

After Januaray 2014, new regions of AWS will only support authentication signature version 4 for S3. At this time, new region includes Frankfurt and China.

To use S3 backend in these regions, add following options to commit_object_backend, fs_object_backend and block_backend section in seafile.conf

```
use_v4_signature = true
# eu-central-1 for Frankfurt region
aws_region = eu-central-1
```

For file search and webdav to work with the v4 signature mechanism, you need to add following lines to ~/.boto

```
[s3]
use-sigv4 = True
```

Using memcached cluster

In a cluster environment, you may want to use a memcached cluster. In the above configuration, you have to specify all the memcached server node addresses in seafile.conf

```
memcached_options = --SERVER=192.168.1.134 --SERVER=192.168.1.135 --SERVER=192.168.1.1
36 --POOL-MIN=10 --POOL-MAX=100 --RETRY-TIMEOUT=3600
```

Notice that there is a `--RETRY-TIMEOUT=3600` option in the above config. This option is important for dealing with memcached server failures. After a memcached server in the cluster fails, Seafile server will stop trying to use it for "RETRY-TIMEOUT" (in seconds). You should set this timeout to relatively long time, to prevent Seafile from retrying the failed server frequently, which may lead to frequent request errors for the clients.

Use HTTPS connections to S3

Since Pro 5.0.4, you can use HTTPS connections to S3. Add the following options to seafile.conf:

```
[commit_object_backend]
name = s3
......
use_https = true

[fs_object_backend]
name = s3
......
use_https = true

[block_backend]
name = s3
......
use_https = true
```

Because the server package is built on CentOS 6, if you're using Debian/Ubuntu, you have to copy the system CA bundle to CentOS's CA bundle path. Otherwise Seafile can't find the CA bundle so that the SSL connection will fail.

```
sudo mkdir -p /etc/pki/tls/certs
sudo cp /etc/ssl/certs/ca-certificates.crt /etc/pki/tls/certs/ca-bundle.crt
sudo ln -s /etc/pki/tls/certs/ca-bundle.crt /etc/pki/tls/cert.pem
```

Another important note is that you **must not use '.' in your bucket names**. Otherwise the wildcard certificate for AWS S3 cannot be resolved. This is a limitation on AWS.

Use S3-compatible Object Storage

Many object storage systems are now compatible with the S3 API, such as OpenStack Swift and Ceph's RADOS Gateway. You can use these S3-compatible storage systems as backend for Seafile. Here is an example config:

```
[commit_object_backend]
name = s3
bucket = my-commit-objects
key_id = your-key-id
key = your-secret-key
host = 192.168.1.123:8080
path_style_request = true
memcached_options = --SERVER=localhost --POOL-MIN=10 --POOL-MAX=100

[fs_object_backend]
name = s3
bucket = my-fs-objects
key_id = your-key-id
key = your-secret-key
host = 192.168.1.123:8080
path_style_request = true
memcached_options = --SERVER=localhost --POOL-MIN=10 --POOL-MAX=100

[block_backend]
name = s3
bucket = my-block-objects
key_id = your-key-id
key = your-secret-key
host = 192.168.1.123:8080
path_style_request = true
memcached_options = --SERVER=localhost --POOL-MIN=10 --POOL-MAX=100
```

`host` is the address and port of the S3-compatible service. You cannot prepend "http" or "https" to the `host` option. By default it'll use http connections. If you want to use https connection, please set `use_https = true` option.

`path_style_request` asks Seafile to use URLs like `https://192.168.1.123:8080/bucketname/object` to access objects. In Amazon S3, the default URL format is in virtual host style, such as `https://bucketname.s3.amazonaws.com/object`. But this style relies on advanced DNS server setup. So most S3-compatible storage systems only implement the path style format.

Run and Test

Now you can start Seafile by `./seafile.sh start` and `./seahub.sh start` and visit the website.

Setup With Ceph

Note: Since Seafile Server 5.0.0, all config files are moved to the central **conf** folder. Read More.

Ceph is a scalable distributed storage system. Seafile can use Ceph's RADOS object storage layer for storage backend.

Copy ceph conf file and client keyring

Seafile acts as a client to Ceph/RADOS, so it needs to access ceph cluster's conf file and keyring. You have to copy these files from a ceph admin node's /etc/ceph directory to the seafile machine.

```
seafile-machine# sudo scp user@ceph-admin-node:/etc/ceph/ /etc
```

Install and enable memcached

For best performance, Seafile requires install memcached and enable memcache for objects.

We recommend to allocate 128MB memory for memcached. Edit /etc/memcached.conf

```
# Start with a cap of 64 megs of memory. It's reasonable, and the daemon default
# Note that the daemon will grow to this size, but does not start out holding this much
# memory
# -m 64
-m 128
```

Install Python Ceph Library

File search and WebDAV functions rely on Python Ceph library installed in the system.

On Debian/Ubuntu:

```
sudo apt-get install python-ceph
```

On RedHat/CentOS:

```
sudo yum install python-rados
```

Edit seafile configuration

Edit `seafile.conf` , add the following lines:

```
[block_backend]
name = ceph
ceph_config = /etc/ceph/ceph.conf
pool = seafile-blocks
memcached_options = --SERVER=localhost --POOL-MIN=10 --POOL-MAX=100

[commit_object_backend]
name = ceph
ceph_config = /etc/ceph/ceph.conf
pool = seafile-commits
memcached_options = --SERVER=localhost --POOL-MIN=10 --POOL-MAX=100

[fs_object_backend]
name = ceph
ceph_config = /etc/ceph/ceph.conf
pool = seafile-fs
memcached_options = --SERVER=localhost --POOL-MIN=10 --POOL-MAX=100
```

It's recommended to create separate pools for commit, fs, and block objects.

```
ceph-admin-node# rados mkpool seafile-blocks
ceph-admin-node# rados mkpool seafile-commits
ceph-admin-node# rados mkpool seafile-fs
```

Using memcached cluster

In a cluster environment, you may want to use a memcached cluster. In the above configuration, you have to specify all the memcached server node addresses in seafile.conf

```
memcached_options = --SERVER=192.168.1.134 --SERVER=192.168.1.135 --SERVER=192.168.1.1
36 --POOL-MIN=10 --POOL-MAX=100 --RETRY-TIMEOUT=3600
```

Notice that there is a `--RETRY-TIMEOUT=3600` option in the above config. This option is important for dealing with memcached server failures. After a memcached server in the cluster fails, Seafile server will stop trying to use it for "RETRY-TIMEOUT" (in seconds). You should set this timeout to relatively long time, to prevent Seafile from retrying the failed server frequently, which may lead to frequent request errors for the clients.

Notes for Ubuntu 16.04

Since version 5.1.0 version, we upgraded the bundled Ceph rados library to 0.94.6. On Ubuntu 16.04, this causes some incompatibility. To work around this issue, you have to install librados 0.94.6 in the Ubuntu system (from Ceph's official repositories) and let Seafile use the library from system. To do this, you have to remove a few bundled libraries:

```
cd seafile-server-latest/seafile/lib
rm librados.so.2 libstdc++.so.6 libnspr4.so
```

Use arbitary Ceph user

The above configuration will use the default (client.admin) user to connect to Ceph. You may want to use some other Ceph user to connect. This is supported in Seafile. To specify the Ceph user, you have to add a `ceph_client_id` option to seafile.conf, as the following:

```
[block_backend]
name = ceph
ceph_config = /etc/ceph/ceph.conf
# Sepcify Ceph user for Seafile here
ceph_client_id = seafile
pool = seafile-blocks
memcached_options = --SERVER=localhost --POOL-MIN=10 --POOL-MAX=100

[commit_object_backend]
name = ceph
ceph_config = /etc/ceph/ceph.conf
# Sepcify Ceph user for Seafile here
ceph_client_id = seafile
pool = seafile-commits
memcached_options = --SERVER=localhost --POOL-MIN=10 --POOL-MAX=100

[fs_object_backend]
name = ceph
ceph_config = /etc/ceph/ceph.conf
# Sepcify Ceph user for Seafile here
ceph_client_id = seafile
pool = seafile-fs
memcached_options = --SERVER=localhost --POOL-MIN=10 --POOL-MAX=100
```

You can create a ceph user for seafile on your ceph cluster like this:

```
ceph auth add client.seafile \
  mds 'allow' \
  mon 'allow r' \
  osd 'allow rwx pool=seafile-blocks, allow rwx pool=seafile-commits, allow rwx pool=seafile-fs'
```

You also have to add this user's keyring path to /etc/ceph/ceph.conf:

```
[client.seafile]
keyring = <path to user's keyring file>
```

Migrate from File System Backend to Ceph

Ceph is a scalable distributed storage system. Seafile can use Ceph's RADOS object storage layer for storage backend.

By default, a typical Seafile server deployment uses file system as storage backend (e.g. Ext4). Later you may want to switch to more scalable storage solution like Ceph. This documentation shows you how to migrate your existing date from file system to Ceph and connect to Ceph. If you're deploying a fresh install with Ceph backend, please refer to setup with Ceph.

Copy ceph conf file and client keyring

Seafile acts as a client to Ceph/RADOS, so it needs to access ceph cluster's conf file and keyring. You have to copy these files from a ceph admin node's /etc/ceph directory to the seafile machine.

```
seafile-machine# sudo scp user@ceph-admin-node:/etc/ceph/ /etc
```

Install and enable memcached

For best performance, Seafile requires install memcached and enable memcache for objects.

We recommend to allocate 128MB memory for memcached. Edit /etc/memcached.conf

```
# Start with a cap of 64 megs of memory. It's reasonable, and the daemon default
# Note that the daemon will grow to this size, but does not start out holding this muc
h
# memory
# -m 64
-m 128
```

Install Python Ceph Library

File search and WebDAV functions rely on Python Ceph library installed in the system.

On Debian/Ubuntu:

```
sudo apt-get install python-ceph
```

On RedHat/CentOS:

```
sudo yum install python-rados
```

Create Pools for Seafile in Ceph

It's recommended to create separate pools for commit, fs, and block objects.

```
ceph-admin-node# rados mkpool seafile-blocks
ceph-admin-node# rados mkpool seafile-commits
ceph-admin-node# rados mkpool seafile-fs
```

Migrate Existing Data to Ceph

The migration process involves 3 steps:

1. Create a Seafile config folder for Ceph
2. Run the migration script
3. Update seafile.conf

Create a Seafile Config Folder for Ceph

In the Seafile installation folder (e.g. `haiwen`),

```
cd haiwen
mkdir ceph-conf
cp conf/seafile.conf ceph-conf
```

Edit `ceph-conf/seafile.conf` , add the following lines:

```
[block_backend]
name = ceph
ceph_config = /etc/ceph/ceph.conf
pool = seafile-blocks
memcached_options = --SERVER=localhost --POOL-MIN=10 --POOL-MAX=100

[commit_object_backend]
name = ceph
ceph_config = /etc/ceph/ceph.conf
pool = seafile-commits
memcached_options = --SERVER=localhost --POOL-MIN=10 --POOL-MAX=100

[fs_object_backend]
name = ceph
ceph_config = /etc/ceph/ceph.conf
pool = seafile-fs
memcached_options = --SERVER=localhost --POOL-MIN=10 --POOL-MAX=100
```

Now there are two seafile.conf files, one under `conf` folder and the other under `ceph-conf` folder.

Run Migration Script

From Pro edition 6.0.0 on, the migration scripts are included in the package. For older versions, you have to download the two scripts into `seafile-server-latest` folder:

- https://github.com/haiwen/seafile-server/blob/master/scripts/seafobj_migrate.py
- https://github.com/haiwen/seafile-server/blob/master/scripts/migrate-to-ceph.sh

You can run the migration script when your Seafile server is still running.

```
cd haiwen/seafile-server-latest
./migrate-to-ceph.sh ../ceph-conf
```

If there is any error in the migration process, the script will stop. After you check and fix the errors, you can run the script again. The script is designed to be idempotent to multiple runs. It only copies non-existing objects to Ceph. The script won't delete any objects from the file system backend.

After the initial migration completes successfully, you need to shutdown the Seafile server and run the script again to migrate the data that's added when you run the initial migration. Since the script won't migrate objects that have been migrated, this phase should finish in a short time.

Update seafile.conf

After migration is done. You need to update `conf/seafile.conf` to make Seafile server use Ceph as backend in the future.

```
cp -R conf conf-backup
cp ceph-conf/seafile.conf conf/seafile.conf
```

After restart, Seafile server will use Ceph as backend.

Using memcached cluster

In a cluster environment, you may want to use a memcached cluster. In the above configuration, you have to specify all the memcached server node addresses in seafile.conf

```
memcached_options = --SERVER=192.168.1.134 --SERVER=192.168.1.135 --SERVER=192.168.1.1
36 --POOL-MIN=10 --POOL-MAX=100 --RETRY-TIMEOUT=3600
```

Notice that there is a `--RETRY-TIMEOUT=3600` option in the above config. This option is important for dealing with memcached server failures. After a memcached server in the cluster fails, Seafile server will stop trying to use it for "RETRY-TIMEOUT" (in seconds). You should set this timeout to relatively long time, to prevent Seafile from retrying the failed server frequently, which may lead to frequent request errors for the clients.

Notes for Ubuntu 16.04

Since version 5.1.0 version, we upgraded the bundled Ceph rados library to 0.94.6. On Ubuntu 16.04, this causes some incompatibility. To work around this issue, you have to install librados 0.94.6 in the Ubuntu system (from Ceph's official repositories) and let Seafile use the library from system. To do this, you have to remove a few bundled libraries:

```
cd seafile-server-latest/seafile/lib
rm librados.so.2 libstdc++.so.6 libnspr4.so
```

Use arbitary Ceph user

The above configuration will use the default (client.admin) user to connect to Ceph. You may want to use some other Ceph user to connect. This is supported in Seafile. To specify the Ceph user, you have to add a `ceph_client_id` option to seafile.conf, as the following:

```
[block_backend]
name = ceph
ceph_config = /etc/ceph/ceph.conf
# Sepcify Ceph user for Seafile here
ceph_client_id = seafile
pool = seafile-blocks
memcached_options = --SERVER=localhost --POOL-MIN=10 --POOL-MAX=100


[commit_object_backend]
name = ceph
ceph_config = /etc/ceph/ceph.conf
# Sepcify Ceph user for Seafile here
ceph_client_id = seafile
pool = seafile-commits
memcached_options = --SERVER=localhost --POOL-MIN=10 --POOL-MAX=100


[fs_object_backend]
name = ceph
ceph_config = /etc/ceph/ceph.conf
# Sepcify Ceph user for Seafile here
ceph_client_id = seafile
pool = seafile-fs
memcached_options = --SERVER=localhost --POOL-MIN=10 --POOL-MAX=100
```

You can create a ceph user for seafile on your ceph cluster like this:

```
ceph auth add client.seafile \
  mds 'allow' \
  mon 'allow r' \
  osd 'allow rwx pool=seafile-blocks, allow rwx pool=seafile-commits, allow rwx pool=s
eafile-fs'
```

You also have to add this user's keyring path to /etc/ceph/ceph.conf:

```
[client.seafile]
keyring = <path to user's keyring file>
```

Setup With OpenStack Swift

Note: Since Seafile Server 5.0.0, all config files are moved to the central **conf** folder. Read More.

Seafile supports OpenStack Swift as storage backend since 5.1.0. This backend uses the native Swift API. Previously users can only use the S3-compatibility layer of Swift. That way is obsolete now. The old documentation is still available here.

Prepare

To setup Seafile Professional Server with Swift:

- Setup the basic Seafile Professional Server following the guide on Download and setup Seafile Professional Server
- Install and configure memcached. For best performance, Seafile requires install memcached and enable memcache for objects. We recommend to allocate 128MB memory for memcached. Edit /etc/memcached.conf

```
# Start with a cap of 64 megs of memory. It's reasonable, and the daemon default
# Note that the daemon will grow to this size, but does not start out holding this much
# memory
# -m 64
-m 128
```

Modify Seafile.conf

Edit `seafile.conf` , add the following lines:

```
[block_backend]
name = swift
tenant = yourTenant
user_name = user
password = secret
container = seafile-blocks
auth_host = 192.168.56.31:5000
auth_ver = v2.0
region = yourRegion
memcached_options = --SERVER=192.168.1.134:11211 --POOL-MIN=10 --POOL-MAX=100

[commit_object_backend]
name = swift
tenant = yourTenant
user_name = user
password = secret
container = seafile-commits
auth_host = 192.168.56.31:5000
auth_ver = v2.0
region = yourRegion
memcached_options = --SERVER=192.168.1.134:11211 --POOL-MIN=10 --POOL-MAX=100

[fs_object_backend]
name = swift
tenant = yourTenant
user_name = user
password = secret
container = seafile-fs
auth_host = 192.168.56.31:5000
auth_ver = v2.0
region = yourRegion
memcached_options = --SERVER=192.168.1.134:11211 --POOL-MIN=10 --POOL-MAX=100
```

The above config is just an example. You should replace the options according to your own environment.

Seafile only supports Swift with Keystone as authentication mechanism. Currently only the v2.0 auth protocol is supported. The `auth_host` option is the address and port of Keystone service.The `region` option is used to select publicURL,if you don't configure it, use the first publicURL in returning authenticated information.

It's recommended to create separate containers for commit, fs, and block objects.

Using memcached cluster

In a cluster environment, you may want to use a memcached cluster. In the above configuration, you have to specify all the memcached server node addresses in seafile.conf

```
memcached_options = --SERVER=192.168.1.134 --SERVER=192.168.1.135 --SERVER=192.168.1.1
36 --POOL-MIN=10 --POOL-MAX=100 --RETRY-TIMEOUT=3600
```

Notice that there is a `--RETRY-TIMEOUT=3600` option in the above config. This option is important for dealing with memcached server failures. After a memcached server in the cluster fails, Seafile server will stop trying to use it for "RETRY-TIMEOUT" (in seconds). You should set this timeout to relatively long time, to prevent Seafile from retrying the failed server frequently, which may lead to frequent request errors for the clients.

Use HTTPS connections to Swift

Since Pro 5.0.4, you can use HTTPS connections to Swift. Add the following options to seafile.conf:

```
[commit_object_backend]
name = swift
......
use_https = true

[fs_object_backend]
name = swift
......
use_https = true

[block_backend]
name = swift
......
use_https = true
```

Because the server package is built on CentOS 6, if you're using Debian/Ubuntu, you have to copy the system CA bundle to CentOS's CA bundle path. Otherwise Seafile can't find the CA bundle so that the SSL connection will fail.

```
sudo mkdir -p /etc/pki/tls/certs
sudo cp /etc/ssl/certs/ca-certificates.crt /etc/pki/tls/certs/ca-bundle.crt
sudo ln -s /etc/pki/tls/certs/ca-bundle.crt /etc/pki/tls/cert.pem
```

Run and Test

Now you can start Seafile by `./seafile.sh start` and `./seahub.sh start` and visit the website.

Seafile Storage Encryption Backend

Since Seafile Professional Server 5.1.3, we support storage enryption backend functionality. When enabled, all seafile objects (commit, fs, block) will be encrypted with AES 256 CBC algorithm, before writing them to the storage backend. Currently supported backends are: file system, Ceph, Swift and S3.

Note that all objects will be encrypted with the same global key/iv pair. The key/iv pair has to be generated by the system admin and stored safely. If the key/iv pair is lost, all data cannot be recovered.

Configure Storage Backend Encryption

Generate Key and IV

Go to /seafile-server-latest, execute `./seaf-gen-key.sh -h` . it will print the following usage information:

```
usage :
seaf-gen-key.sh
 -p <file path to write key iv, default ./seaf-key.txt>
```

By default, the key/iv pair will be saved to a file named seaf-key.txt in the current directory. You can use '-p' option to change the path.

Configure a freshly installed Seafile Server

Add the following configuration to seafile.conf:

```
[store_crypt]
key_path = <the key file path generated in previous section>
```

Now the encryption feature should be working.

Migrating Existing Seafile Server

If you have existing data in the Seafile server, you have to migrate/encrypt the existing data. **You must stop Seafile server before migrating the data.**

Create Directories for Encrypted Data

Create new configuration and data directories for the encrypted data.

```
cd seafile-server-latest
cp -r conf conf-enc
mkdir seafile-data-enc
cp -r seafile-data/library-template seafile-data-enc
# If you use SQLite database
cp seafile-data/seafile.db seafile-data-enc/
```

Edit Config Files

If you configured S3/Swift/Ceph backend, edit /conf-enc/seafile.conf. You must use a different bucket/container/pool to store the encrypted data.

Then add the following configuration to /conf-enc/seafile.conf

```
[store_crypt]
key_path = <the key file path generated in previous section>
```

Migrate the Data

Go to /seafile-server-latest, use the seaf-encrypt.sh script to migrate the data.

Run `./seaf-encrypt.sh -f ../conf-enc -e ../seafile-data-enc`,

```
Starting seaf-encrypt, please wait ...
[04/26/16 06:59:40] seaf-encrypt.c(444): Start to encrypt 57 block among 12 repo.
[04/26/16 06:59:40] seaf-encrypt.c(444): Start to encrypt 102 fs among 12 repo.
[04/26/16 06:59:41] seaf-encrypt.c(454): Success encrypt all fs.
[04/26/16 06:59:40] seaf-encrypt.c(444): Start to encrypt 66 commit among 12 repo.
[04/26/16 06:59:41] seaf-encrypt.c(454): Success encrypt all commit.
[04/26/16 06:59:41] seaf-encrypt.c(454): Success encrypt all block.
seaf-encrypt run done
Done.
```

If there are error messages after executing seaf-encrypt.sh, you can fix the problem and run the script again. Objects that have already been migrated will not be copied again.

Clean Up

Go to , execute following commands:

```
mv conf conf-bak
mv seafile-data seafile-data-bak
mv conf-enc conf
mv seafile-data-enc seafile-data
```

Restart Seafile Server. If everything works okay, you can remove the backup directories.

Migrate data between different backends

Seafile supports data migration between filesystem, s3, ceph, swift and Alibaba oss (migrating from swift is not supported yet, this support will be added in the future). If you enabled storage backend encryption feature, migration is not supported at the moment.

Data migration takes 3 steps:

1. Create a new temporary seafile.conf
2. Run migrate.sh
3. Replace the original seafile.conf

Create a new temporary seafile.conf

We need to add new backend configurations to this file (including `[block_backend]`, `[commit_object_backend]`, `[fs_object_backend]` options) and save it under a readable path. Let's assume that we are migrating data to S3 and create temporary seafile.conf under `/opt`

```
cat > seafile.conf << EOF
[commit_object_backend]
name = s3
bucket = seacomm
key_id = ******
key = ******

[fs_object_backend]
name = s3
bucket = seafs
key_id = ******
key = ******

[block_backend]
name = s3
bucket = seablk
key_id = ******
key = ******
EOF

mv seafile.conf /opt
```

Repalce the configurations with your own choice.

Run migrate.sh

We assume you have installed seafile pro server under `~/haiwen` , enter `~/haiwen/seafile-server-latest` and run migrate.sh with parent path of temporary seafile.conf as parameter, here is `/opt` .

```
cd ~/haiwen/seafile-server-latest
./migrate.sh /opt
```

Replace the original seafile.conf

After running the script, we need replace the original seafile.conf with new one:

```
mv /opt/seafile.conf ~/haiwen/conf
```

now we only have configurations about backend, more config options, e.g. memcache and quota, please refer to this tutorial.

After replacing seafile.conf, you can restart seafile server and access the data on the new backend.

Deploy in a cluster

Update: Since Seafile Pro server 6.0.0, cluster deployment requires "sticky session" settings in the load balancer. Otherwise sometimes folder download on the web UI can't work properly. Read the "Load Balancer Setting" section below for details.

Architecture

The Seafile cluster solution employs a 3-tier architecture:

- Load balancer tier: Distribute incoming traffic to Seafile servers. HA can be achieved by deploying multiple load balancer instances.
- Seafile server cluster: a cluster of Seafile server instances. If one instance fails, the load balancer will stop handing traffic to it. So HA is achieved.
- Backend storage: Distributed storage cluster, e.g. S3, Openstack Swift or Ceph.

This architecture scales horizontally. That means, you can handle more traffic by adding more machines. The architecture is visualized in the following picture.
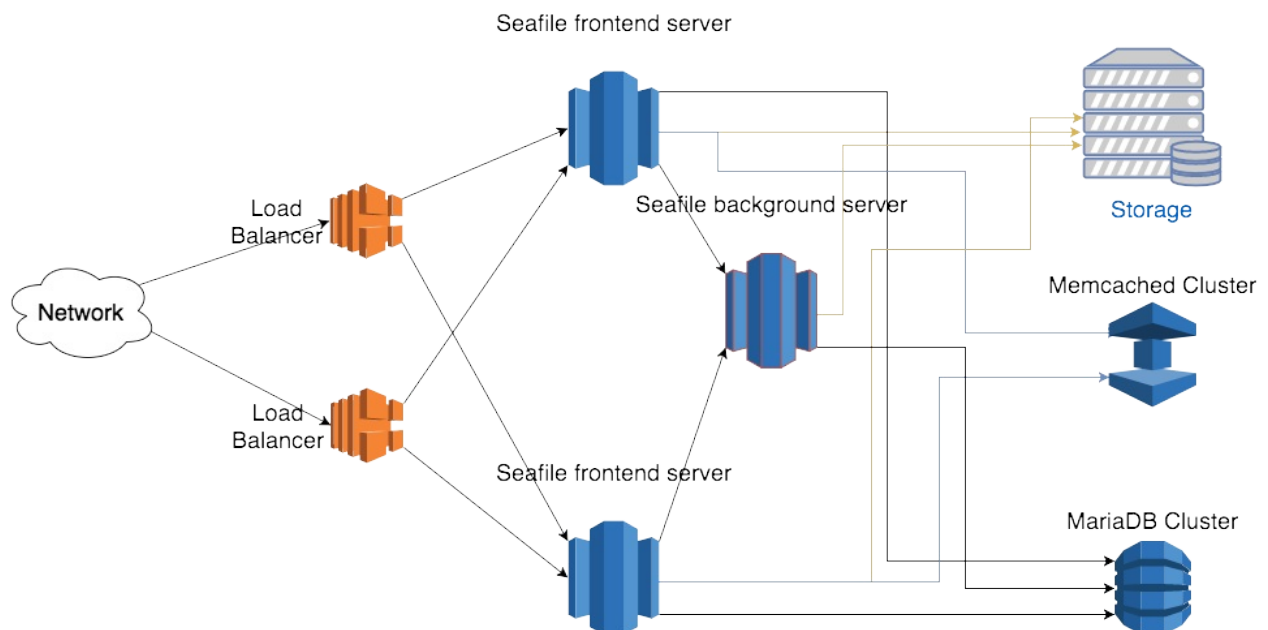
There are two main components on the Seafile server node: web server (Nginx/Apache) and Seafile app server. The web server passes requests from the clients to Seafile app server. The Seafile app servers work independently. They don't know about each other's state. That means each app server can fail independently without affecting other app server instances. The load balancer is responsible for detecting failure and re-routing requests.

Even though Seafile app servers work independently, they still have to share some session information. All shared session information is stored in memcached. Thus, all Seafile app servers have to connect to the same memcached server (cluster). More details about

memcached configuration is available later.

The background server is the workhorse for various background tasks, including full-text indexing, office file preview, virus scanning, LDAP syncing. It should usually be run on a dedicated server for better performance. Currently only one background task server can be running in the entire cluster. If more than one background servers are running, they may conflict with each others when doing some tasks. If you need HA for background task server, you can consider using Keepalived to build a hot backup for it. More details can be found in background server setup.

All Seafile app servers access the same set of user data. The user data has two parts: One in the MySQL database and the other one in the backend storage cluster (S3, Ceph etc.). All app servers serve the data equally to the clients.

All app servers have to connect to the same database or database cluster. We recommend to use MariaDB Galera Cluster if you need a database cluster.

There are a few steps to deploy a Seafile cluster:

1. Prepare hardware, operating systems, memcached and database
2. Setup a single Seafile server node
3. Copy the deployment to other Seafile nodes
4. Setup Nginx/Apache and firewall rules
5. Setup load balancer
6. Setup backgroup task node

Preparation

Hardware, Database, Memcached

At least 3 Linux server with at least 4GB RAM. Two servers work as frontend servers, while one server works as background task server.

In small cluster, you can re-use the 3 Seafile servers to run memcached cluster and MariaDB cluster. For larger clusters, you can have 3 more dedicated server to run memcached cluster and MariaDB cluster. Because the load on these two clusters are not high, they can share the hardware to save cost. Documentation about how to setup memcached cluster and MariaDB cluster can be found here

Install Python libraries

On each mode, you need to install some python libraries.

First make sure your have installed Python 2.7, then:

```
sudo easy_install pip
sudo pip install boto
```

If you receive an error stating "Wheel installs require setuptools >= ...", run this between the pip and boto lines above

```
sudo pip install setuptools --no-use-wheel --upgrade
```

Configure a Single Node

You should make sure the config files on every Seafile server are consistent.

Get the license

Put the license you get under the top level diretory. In our wiki, we use the diretory `/data/haiwen/` as the top level directory.

Download/Uncompress Seafile Professional Server

```
tar xf seafile-pro-server_6.1.3_x86-64.tar.gz
```

Now you have:

```
haiwen
├── seafile-license.txt
└── seafile-pro-server-6.1.3/
```

Setup Seafile

Please follow Download and Setup Seafile Professional Server With MySQL to setup a single Seafile server node.

Note: **Use the load balancer's address or domain name for the server address. Don't use the local IP address of each Seafile server machine. This assures the user will always access your service via the load balancers.**

After the setup process is done, you still have to do a few manual changes to the config files.

seafile.conf

You have to add the following configuration to `seafile.conf`

```
[cluster]
enabled = true
memcached_options = --SERVER=192.168.1.134 --POOL-MIN=10 --POOL-MAX=100
```

If you have a memcached cluster, you need to specify all the memcached server addresses in seafile.conf. The format is

```
[cluster]
enabled = true
memcached_options = --SERVER=192.168.1.134 --SERVER=192.168.1.135 --SERVER=192.168.1.1
36 --POOL-MIN=10 --POOL-MAX=100 --RETRY-TIMEOUT=3600
```

Notice that there is a `--RETRY-TIMEOUT=3600` option in the above config. This option is important for dealing with memcached server failures. After a memcached server in the cluster fails, Seafile server will stop trying to use it for "RETRY-TIMEOUT" (in seconds). You should set this timeout to relatively long time, to prevent Seafile from retrying the failed server frequently, which may lead to frequent request errors for the clients.

(Optional) The Seafile server also opens a port for the load balancers to run health checks. Seafile by default uses port 11001. You can change this by adding the following config option to `seafile.conf`

```
[cluster]
health_check_port = 12345
```

seahub_settings.py

You must setup and use memcached when deploying Seafile cluster. Refer to "add memcached" to use memcached in Seahub.

Also add following options to seahub_setting.py. These settings tell Seahub to store avatar in database and cache avatar in memcached, and store css CACHE to local memory.

```
AVATAR_FILE_STORAGE = 'seahub.base.database_storage.DatabaseStorage'

COMPRESS_CACHE_BACKEND = 'django.core.cache.backends.locmem.LocMemCache'
```

`COMPRESS_CACHE_BACKEND` is needed because the CSS file is created on the fly when any user first visit any page after a new Seafile version being deployed. The CSS file is saved to local disk and the path of the file is saved to cache. If `COMPRESS_CACHE_BACKEND` is not set to use LocMemCache, after one machine in a cluster generating the CSS file, another machine will not generate the file again, which will cause CSS file not found problem in this second machine.

seafevents.conf

Add following to `seafevents.conf` to disable file indexing service on the local server. The file indexing service should be started on a dedicated background server.

```
[INDEX FILES]
external_es_server = true
```

Here is an example `[INDEX FILES]` section:

```
[INDEX FILES]
enabled = true
interval = 10m
index_office_pdf = true
external_es_server = true
es_host = background.seafile.com
es_port = 9500
```

Note: `enable = true` should be left unchanged.

Update Seahub Database

In cluster environment, we have to store avatars in the database instead of in a local disk.

```
CREATE TABLE `avatar_uploaded` (`filename` TEXT NOT NULL, `filename_md5` CHAR(32) NOT
NULL PRIMARY KEY, `data` MEDIUMTEXT NOT NULL, `size` INTEGER NOT NULL, `mtime` datetim
e NOT NULL);
```

Backend Storage Settings

You also need to add the settings for backend cloud storage systems to the config files.

- For NFS: Setup Seafile cluster with NFS
- For S3: Setup With Amazon S3
- For OpenStack Swift: Setup With OpenStackSwift
- For Ceph: Setup With Ceph

Run and Test the Single Node

Once you have finished configuring this single node, start it to test if it runs properly:

```
cd /data/haiwen/seafile-server-latest
./seafile.sh start
./seahub.sh start
```

Note: The first time you start seahub, the script would prompt you to create an admin account for your Seafile server.

Open your browser, visit http://ip-address-of-this-node:8000 and login with the admin account.

Configure other nodes

Now you have one node working fine, let's continue to configure more nodes.

Copy the config to all Seafile servers

Supposed your Seafile installation directory is `/data/haiwen` , compress this whole directory into a tarball and copy the tarball to all other Seafile server machines. You can simply uncompress the tarball and use it.

On each node, run `./seafile.sh` and `./seahub.sh` to start Seafile server.

Setup Nginx/Apache and Https

You'll usually want to use Nginx/Apache and https for web access. You need to set it up on each machine running Seafile server. **Make sure the certificate on all the servers are the same.**

- For Nginx:
    - Config Seahub with Nginx
    - Enabling Https with Nginx
- For Apache:
    - Config Seahub with Apache
    - Enabling Https with Apache

Start Seafile Service on boot

It would be convenient to setup Seafile service to start on system boot. Follow this documentation to set it up on **all nodes**.

Firewall Settings

Beside standard ports of a seafile server, there are 2 firewall rule changes for Seafile cluster:

- On each Seafile server machine, you should open the health check port (default 11001);
- On the memcached server, you should open the port 11211. For security resons only

the Seafile servers should be allowed to access this port.

Load Balancer Setting

Now that your cluster is already running, fire up the load balancer and welcome your users. Since version 6.0.0, Seafile Pro requires "sticky session" settings in the load balancer. You should refer to the manual of your load balancer for how to set up sticky sessions.

AWS Elastic Load Balancer (ELB)

In the AWS ELB management console, after you've added the Seafile server instances to the instance list, you should do two more configurations.

First you should setup HTTP(S) listeners. Ports 443 and 80 of ELB should be forwarded to the ports 80 or 443 of the Seafile servers.

Then you setup health check

Description	Instances	Health Check	Monitoring	Security	Listeners
Ping Target:	TCP:11001				
Timeout:	5 seconds				
Interval:	30 seconds				
Unhealthy Threshold:	2				
Healthy Threshold:	3				
Edit Health Check					

Refer to AWS documentation about how to setup sticky sessions.

HAProxy

This is a sample `/etc/haproxy/haproxy.cfg` :

(Assume your health check port is `11001`)

```
global
    log 127.0.0.1 local1 notice
    maxconn 4096
    user haproxy
    group haproxy

defaults
    log global
    mode http
    retries 3
    maxconn 2000
    timeout connect 10000
    timeout client 300000
    timeout server 300000

listen seafile 0.0.0.0:80
    mode http
    option httplog
    option dontlognull
    option forwardfor
    cookie SERVERID insert indirect nocache
    server seafileserver01 192.168.1.165:80 check port 11001 cookie seafileserver01
    server seafileserver02 192.168.1.200:80 check port 11001 cookie seafileserver02
```

See how it runs

Now you should be able to test your cluster. Open https://seafile.example.com in your browser and enjoy. You can also synchronize files with Seafile clients.

If the above works, the next step would be Enable search and background tasks in a cluster.

Note: Before you try to deploy file search office documents preview, make sure other parts of your seafile cluster are already working, e.g upload/download files in a web browser. Make sure memcached is configured as described in "Deploy in a cluster".

Enable search and background tasks in a cluster

In the seafile cluster, only one server should run the background tasks, including:

- indexing files for search
- email notification
- office documents converts service
- LDAP sync
- virus scan

Let's assume you have three nodes in your cluster: A, B, and C.

- Node A is backend node that run background tasks.
- Node B and C are frontend nodes that serving requests from clients.
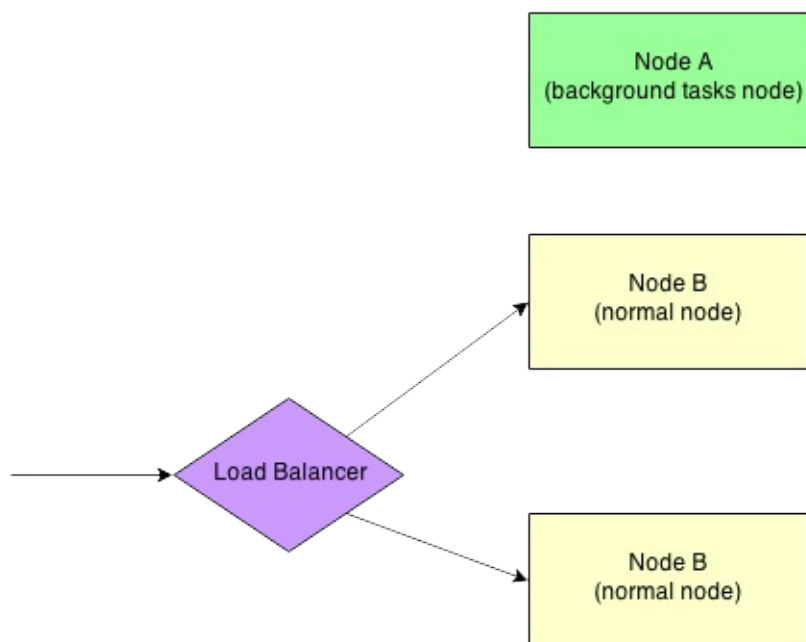
Configuring Node A (the backend node)

If you following the steps on settings up a cluster, node B and node C should have already be configed as frontend node. You can copy the configuration of node B as a base for node A. Then do the following steps:

Install Dependencies (Java, LibreOffice, poppler)

On Ubuntu/Debian:

```
sudo apt-get install openjdk-7-jre libreoffice poppler-utils python-uno # or python3-u
no for ubuntu 14.04+
```

On CentOS/Red Hat:

```
sudo yum install java-1.7.0-openjdk
sudo yum install libreoffice libreoffice-headless libreoffice-pyuno
sudo yum install poppler-utils
```

Edit **seafevents.conf** and ensure this line does NOT exist:

```
external_es_server = true
```

Edit **seahub_settings.py** and add a line:

```
OFFICE_CONVERTOR_NODE = True
```

Edit **seafile.conf** to enable virus scan according to virus scan document

Edit the firewall rules

In your firewall rules for node A, you should open the port 9500 (for search requests).

Configure Other Nodes

On nodes B and C, you need to:

- Edit `seafevents.conf` , add the following lines:
  ```
  [INDEX FILES]
  external_es_server = true
  es_host = <ip of node A>
  es_port = 9200
  ```

Edit **seahub_settings.py** and add a line:

```
OFFICE_CONVERTOR_ROOT = 'http://<ip of node A>'
```

Make sure requests to http:// is also handled by Seahub. For example, you may need to add this Nginx configuration in the background node:

```
server {
    listen 80;
    server_name <IP of node A>;
    location / {
        proxy_pass          http://127.0.0.1:8000;
        ...
  }
```

As a simple test, you can use this command to test if you set it up correctly.

```
curl -v http://<IP of node A>/office-convert/internal/status/
```

It should say "400 Bad Request" when you have Nginx config updated.

Start the background node

Type the following commands to start the background node (Note, one additional command `seafile-background-tasks.sh` is needed)

```
./seafile.sh start
./seahub.sh start # or "./seahub.sh start-fastcgi" if you're using fastcgi
./seafile-background-tasks.sh start
```

To stop the background node, type:

```
./seafile-background-tasks.sh stop
./seafile.sh stop
./seahub.sh stop
```

You should also configure Seafile background tasks to start on system bootup. For systemd based OS, you can add `/etc/systemd/system/seafile-background-tasks.service` :

```
[Unit]
Description=Seafile Background Tasks Server
After=network.target seahub.service

[Service]
Type=oneshot
ExecStart=/opt/seafile/seafile-server-latest/seafile-background-tasks.sh start
ExecStop=/opt/seafile/seafile-server-latest/seafile-background-tasks.sh stop
RemainAfterExit=yes
User=root
Group=root

[Install]
WantedBy=multi-user.target
```

Then enable this task in systemd:

```
systemctl enable seafile-background-tasks.service
```

Setup Memcached Cluster and MariaDB Galera Cluster

For high availability, it is recommended to set up a memcached cluster and MariaDB Galera cluster for Seafile cluster. This documentation will provide information on how to do this with 3 servers. You can either use 3 dedicated servers or use the 3 Seafile server nodes.

Setup Memcached Cluster

Seafile servers share session information within memcached. So when you set up a Seafile cluster, there needs to be a memcached server (cluster) running.

The simplest way is to use a single-node memcached server. But when this server fails, some functions in the web UI of Seafile cannot work. So for HA, it's usually desirable to have more than one memcached servers.

Unlike other cluster architecture, key distribution in memcached cluster is controlled by the memcached clients. So there is no special configuration on the memcached server for building a cluster. But there are a few things to take care when building a memcached cluster:

- Make sure all the seafile server nodes connects to all the memcached nodes. The memcached servers should be listed in the same order in Seafile's config files.
- After one memcached server gets shut down and restarted, sometimes the Seafile servers' views on the memcached cluster will become inconsistent. This is due to limitation of the memcached cluster architecture. You may notice some errors in the web UI functionalities. You have to restart the Seafile server processes to make their views consistent again. Typical error messages you can find in seafile.log are:
    - `SERVER HAS FAILED AND IS DISABLED UNTIL TIMED RETRY`
    - `SERVER IS MARKED DEAD`

Seafile servers, work as memcached clients, are designed to automatically migrate keys to living memcached nodes when a memcached node fails. So a memcached node failure usually doesn't affect the service availability.

Setup MariaDB Cluster

MariaDB cluster helps you to remove single point of failure from the cluster architecture. Every update in the database cluster is synchronously replicated to all instances.

You can choose between two different setups:

- For a small cluster with 3 nodes, you can run MariaDB cluster directly on the Seafile server nodes. Each Seafile server access its local instance of MariaDB.
- For larger clusters, it's preferable to have 3 dedicated MariaDB nodes to form a cluster. You have to set up a HAProxy in front of the MariaDB cluster. Seafile will access database via HAProxy.

We refer to the documentation from MariaDB team:

- Setting up MariaDB cluster on CentOS 7
- Setting up HAProxy for MariaDB Galera Cluster. Note that Seafile doesn't use read/write isolation techniques. So you don't need to setup read and write pools.

Setup Seafile cluster with NFS

In a Seafile cluster, one common way to share data among the Seafile server instances is to use NFS. You should only share the files objects on NFS. Here we'll provide a tutorial about how and what to share.

How to setup nfs server and client is beyond the scope of this wiki. Here are few references:

- Ubuntu: https://help.ubuntu.com/community/SettingUpNFSHowTo
- CentOS: http://www.centos.org/docs/5/html/Deployment_Guide-en-US/ch-nfs.html

Supposed your seafile server installation directory is `/data/haiwen` , after you run the setup script there should be a `seafile-data` directory in it. And supposed you mount the NFS drive on `/seafile-nfs` , you should follow a few steps:

- Move the `seafile-data` folder to `/seafile-nfs` :

```
mv /data/haiwen/seafile-data /seafile-nfs/
```

- On every node in the cluster, make a symbolic link to the shared seafile-data folder

```
cd /data/haiwen
ln -s /seafile-nfs/seafile-data /data/haiwen/seafile-data
```

This way the instances will share the same `seafile-data` folder. All other config files and log files will remain independent.

Upgrade a Seafile cluster

Major and minor version upgrade

Seafile adds new features in major and minor versions. It is likely that some database tables need to be modified or the search index need to be updated. In general, upgrading a cluster contains the following steps:

1. Upgrade the database
2. Update symbolic link at frontend and backend nodes to point to the newest version
3. Update configuration files at each node
4. Update search index in the backend node

In general, to upgrade a cluster, you need:

1. Run the upgrade script (for example, ./upgrade/upgrade_4_0_4_1.sh) in one frontend node
2. Run the minor upgrade script (./upgrade/minor_upgrade.sh) in all other nodes to update symbolic link
3. Update configuration files at each node according to the documentation for each version
4. Delete old search index in the backend node if needed

Maintanence upgrade

Doing maintanence upgrading is simple, you only need to run the script `./upgrade/minor_upgrade.sh` at each node to update the symbolic link.

Specific instructions for each version

From 6.0 to 6.1

In version 6.1, we upgraded the included ElasticSearch server. The old server listen on port 9500, new server listen on port 9200. Please change your firewall settings.

From 5.1 to 6.0

In version 6.0, the folder download mechanism has been updated. This requires that, in a cluster deployment, seafile-data/httptemp folder must be in an NFS share. You can make this folder a symlink to the NFS share.

```
cd /data/haiwen/
ln -s /nfs-share/seafile-httptemp seafile-data/httptemp
```

The httptemp folder only contains temp files for downloading/uploading file on web UI. So there is no reliability requirement for the NFS share. You can export it from any node in the cluster.

From v5.0 to v5.1

Because Django is upgraded to 1.8, the COMPRESS_CACHE_BACKEND should be changed

```
-    COMPRESS_CACHE_BACKEND = 'locmem://'
+    COMPRESS_CACHE_BACKEND = 'django.core.cache.backends.locmem.LocMemCache'
```

From v4.4 to v5.0

v5.0 introduces some database schema change, and all configuration files (ccnet.conf, seafile.conf, seafevents.conf, seahub_settings.py) are moved to a central config directory.

Perform the following steps to upgrade:

- Run the upgrade script at one fronend node to upgrade the database.

  ```
  ./upgrade/upgrade_4.4_5.0.sh
  ```

- Then, on all other frontend nodes and the background node, run the upgrade script with `SEAFILE_SKIP_DB_UPGRADE` environmental variable turned on:

  ```
  SEAFILE_SKIP_DB_UPGRADE=1 ./upgrade/upgrade_4.4_5.0.sh
  ```

After the upgrade, you should see the configuration files has been moved to the conf/ folder.

```
conf/
  |__ ccnet.conf
  |__ seafile.conf
  |__ seafevent.conf
  |__ seafdav.conf
  |__ seahub_settings.conf
```

From v4.3 to v4.4

There are no database and search index upgrade from v4.3 to v4.4. Perform the following steps to upgrade:

1. Run the minor upgrade script at frontend and backend nodes

From v4.2 to v4.3

v4.3 contains no database table change from v4.2. But the old search index will be deleted and regenerated.

A new option COMPRESS_CACHE_BACKEND = 'django.core.cache.backends.locmem.LocMemCache' should be added to seahub_settings.py

The secret key in seahub_settings.py need to be regenerated, the old secret key lack enough randomness.

Perform the following steps to upgrade:

1. Run the upgrade script at one fronend node to modify the seahub_settings.py
2. Modify seahub_settings.py at each node, replacing the old secret key with the new one and add option COMPRESS_CACHE_BACKEND
3. Run the minor upgrade script at frontend and backend nodes
4. Delete the old search index (the folder pro-data/search) at the backend node
5. Delete the old office preview output folder (/tmp/seafile-office-output) at the backend node

Multiple Organization/Institution User Management

Starting from version 5.1, you can add institutions into Seafile and assign users into institutions. Each institution can have one or more administrators. This feature is to ease user administration when multiple organizations (universities) share a single Seafile instance. Unlike multi-tenancy, the users are not-isolated. A user from one institution can share files with another institution.

Turn on the feature

In `seahub_settings.py` , add `MULTI_INSTITUTION = True` to enable multi-institution feature. And add

```
EXTRA_MIDDLEWARE_CLASSES += (
    'seahub.institutions.middleware.InstitutionMiddleware',
)
```

or

```
EXTRA_MIDDLEWARE_CLASSES = (
    'seahub.institutions.middleware.InstitutionMiddleware',
)
```

if `EXTRA_MIDDLEWARE_CLASSES` is not defined.

Add institutions and institution admins

After restarting Seafile, a system admin can add institutions by adding institution name in admin panel. He can also click into an institution, which will list all users whose `profile.institution` match the name.

Assign users to institutions

If you are using Shibboleth, you can map a Shibboleth attribute into institution. For example, the following configuration maps organization attribute to institution.

```
SHIBBOLETH_ATTRIBUTE_MAP = {
    "givenname": (False, "givenname"),
    "sn": (False, "surname"),
    "mail": (False, "contact_email"),
    "organization": (False, "institution"),
}
```

```
SHIBBOLETH_ATTRIBUTE_MAP = {
    "givenname": (False, "givenname"),
    "sn": (False, "surname"),
    "mail": (False, "contact_email"),
    "organization": (False, "institution"),
}
```

Roles and Permissions Support

Starting from version 6.0, you can add/edit roles and permission for users. A role is just a group of users with some pre-defined permissions, you can toggle user roles in user list page at admin panel.

In version 6.0, we support 10 permissions, more permissions will be added later.

In version 6.1, we added a new permission `role_quota` which can be used to set quota for a certain role of users. For example, we can set the quota of employee to 100G by adding `'role_quota': '100g'`, and leave other role of users to the default quota.

Seafile comes with two build-in roles `default` and `guest`, a default user is a normal user with permissions as followings:

```
'default': {
    'can_add_repo': True,
    'can_add_group': True,
    'can_view_org': True,
    'can_use_global_address_book': True,
    'can_generate_share_link': True,
    'can_generate_upload_link': True,
    'can_invite_guest': False,
    'can_connect_with_android_clients': True,
    'can_connect_with_ios_clients': True,
    'can_connect_with_desktop_clients': True,
    'role_quota': '',
},
```

While a guest user can only read files/folders in the system, here are the permissions for a guest user:

```
'guest': {
    'can_add_repo': False,
    'can_add_group': False,
    'can_view_org': False,
    'can_use_global_address_book': False,
    'can_generate_share_link': False,
    'can_generate_upload_link': False,
    'can_invite_guest': False,
    'can_connect_with_android_clients': False,
    'can_connect_with_ios_clients': False,
    'can_connect_with_desktop_clients': False,
    'role_quota': '',
},
```

Edit build-in roles

If you want to edit the permissions of build-in roles, e.g. default users can invite guest, guest users can view repos in organization, you can add following lines to `seahub_settings.py` with corresponding permissions set to `True` .

```
ENABLED_ROLE_PERMISSIONS = {
    'default': {
        'can_add_repo': True,
        'can_add_group': True,
        'can_view_org': True,
        'can_use_global_address_book': True,
        'can_generate_share_link': True,
        'can_generate_upload_link': True,
        'can_invite_guest': True,
        'can_connect_with_android_clients': True,
        'can_connect_with_ios_clients': True,
        'can_connect_with_desktop_clients': True,
        'role_quota': '',
    },
    'guest': {
        'can_add_repo': False,
        'can_add_group': False,
        'can_view_org': True,
        'can_use_global_address_book': False,
        'can_generate_share_link': False,
        'can_generate_upload_link': False,
        'can_invite_guest': False,
        'can_connect_with_android_clients': False,
        'can_connect_with_ios_clients': False,
        'can_connect_with_desktop_clients': False,
        'role_quota': '',
    }
}
```

More about guest invitation feature

An user who has `can_invite_guest` permission can invite people outside of the organization as guest.

In order to use this feature, in addition to granting `can_invite_guest` permission to the user, add the following line to `seahub_settings.py` ,

```
ENABLE_GUEST_INVITATION = True
```

After restarting, users who have `can_invite_guest` permission will see "Invite People" section at sidebar of home page.

Users can invite a guest user by providing his/her email address, system will email the invite link to the user.

Tip: If you want to block certain email addresses for the invitation, you can define a blacklist, e.g.

```
INVITATION_ACCEPTER_BLACKLIST = ["a@a.com", "*@a-a-a.com", r".*@(foo|bar).com", ]
```

After that, email address "a@a.com", any email address ends with "@a-a-a.com" and any email address ends with "@foo.com" or "@bar.com" will not be allowed.

Add custom roles

If you want to add a new role and assign some users with this role, e.g. new role `employee` can invite guest and have all other permissions a default user has, you can add following lines to `seahub_settings.py`

```
ENABLED_ROLE_PERMISSIONS = {
    'default': {
        'can_add_repo': True,
        'can_add_group': True,
        'can_view_org': True,
        'can_use_global_address_book': True,
        'can_generate_share_link': True,
        'can_generate_upload_link': True,
        'can_invite_guest': False,
        'can_connect_with_android_clients': True,
        'can_connect_with_ios_clients': True,
        'can_connect_with_desktop_clients': True,
        'role_quota': '',
    },
    'guest': {
        'can_add_repo': False,
        'can_add_group': False,
        'can_view_org': False,
        'can_use_global_address_book': False,
        'can_generate_share_link': False,
        'can_generate_upload_link': False,
        'can_invite_guest': False,
        'can_connect_with_android_clients': False,
        'can_connect_with_ios_clients': False,
        'can_connect_with_desktop_clients': False,
        'role_quota': '',
    },
    'employee': {
        'can_add_repo': True,
        'can_add_group': True,
        'can_view_org': True,
        'can_use_global_address_book': True,
        'can_generate_share_link': True,
        'can_generate_upload_link': True,
        'can_invite_guest': True,
        'can_connect_with_android_clients': True,
        'can_connect_with_ios_clients': True,
        'can_connect_with_desktop_clients': True,
        'role_quota': '',
    },
}
```

Multi-tenancy feature is designed for hosting providers that what to host several customers in a single Seafile instance. You can create multi-organizations. Organizations is separated from each other. Users can't share libraries between organizations.

Seafile Config

seafile.conf

```
[general]
multi_tenancy = true
```

seahub_settings.py

```
CLOUD_MODE = True
MULTI_TENANCY = True

ORG_MEMBER_QUOTA_ENABLED = True
```

Usage

An organization can be created via system admin in "admin panel->organization->Add organization".

Every organization has an URL prefix. This field is *for future usage*. When a user create an organization, an URL like org1 will be automatically assigned.

After creating an organization, the first user will become the admin of that organization. The organization admin can add other users. Note, the system admin can't add users.

Two-Factor Authentication

Starting from version 6.0, we added Two-Factor Authentication to enhance account security.

There are two ways to enable this feature:

- System admin can tick the check-box at the "Password" section of the system settings page, or

- just add `ENABLE_TWO_FACTOR_AUTH = True` to `seahub_settings.py` and restart service.

After that, there will be a "Two-Factor Authentication" section in the user profile page.

Users can use the Google Authenticator app on their smart-phone to scan the QR code.

Twilio intergration

We also support text message methods by using the Twilio service.

First you need to install the Twilio python library by

```
sudo pip install twilio
```

After that, append the following lines to `seahub_settings.py`,

```
TWO_FACTOR_SMS_GATEWAY = 'seahub_extra.two_factor.gateways.twilio.gateway.Twilio'
TWILIO_ACCOUNT_SID = '<your-account-sid>'
TWILIO_AUTH_TOKEN = '<your-auth-token>'
TWILIO_CALLER_ID = '<your-caller-id>'
EXTRA_MIDDLEWARE_CLASSES = (
    'seahub_extra.two_factor.gateways.twilio.middleware.ThreadLocals',
)
```

Note: if you have already defined `EXTRA_MIDDLEWARE_CLASSES`, please replace `EXTRA_MIDDLEWARE_CLASSES = (` with `EXTRA_MIDDLEWARE_CLASSES += (`

After restarting, there will be a "text message" method when users enable Two-Factor Authentication for their account.

Seafile Real-Time Backup Server

Backup is the procedure that copies data from a primary server (which is running production service) to a backup server.

Backup is an important procedure to keep data safe. The basic backup procedure described in this documentation has a few drawbacks:

- The backup is done in fixed "backup windows" (once per day or a few times per day). The latest data written between two backup windows will be lost if the primary server storage is damaged.
- The backup procedure backup database and data directory separately. In the backup server, some entries in the database may become inconsistent with the data directory. This causes some libraries become "corrupted" after restore.

The real-time backup server uses a syncing algorithm similar to the Seafile desktop client to retrieve data from the primary server. It works as follows:

- Whenever a library is updated, the primary server notifies the backup server to retrieve the changed data. With a delta syncing algorithm, this procedure runs quickly and updates the backup server in nearly real-time.
- The backup server also checks all libraries on the primary server at a fixed period. Any new or updated libraries will be synced to the backup server. This will pick up any legged updates due to glitches in the above real-time sync procedure.
- The backup server always keep the database and data directory consistent. So no libraries on the backup server will be in corrupted state (unless they're already corrupted on the primary server).
- The full history of all libraries will be backed up. This is not like the desktop client, which only syncs the latest state of a library.

There are two sets of data that need to be backup:

- The seafile-data directory and the core library metadata tables in the seafile database. This data is the core data structures of the libraries in Seafile. They're synced to the backup server with Seafile's syncing algorithm. In this procedure, the metadata tables are kept consistent with the seafile-data directory.
- All other tables in the database (including seafile, ccnet and seahub databases) are backup with MySQL replication.

Configure Real-Time Backup Server

We assume you already have a primary server running, and now you want to setup a backup server.

The steps to setup the backup server are:

1. Install Seafile on the backup server
2. Configure MySQL replication between the primary server and the backup server
3. Configure Seafile syncing between the primary server and the backup server

Install Seafile on the Backup Server

You should install Seafile Pro Edition on the backup server according to this documentation. Since the real-time backup feature is only available for 5.1.0 or later, you also have to upgrade your primary server to 5.1.0 version or later.

When installing Seafile on the backup server, you have to notice:

- The database names (ccnet, seafile and seahub database) should be the same as the names on the primary server.
- You don't need to enable other Pro features, such as Office file preview, search indexing, file auditing etc.

Configure MySQL Replication

MySQL replication asynchronously replicates database updates from a Master server (in our case, the primary server) to a Slave server (the backup server). To better understand how MySQL replication works and how to configure it, you should first read MySQL official documentation. The following steps are based on the steps in MySQL documentation, with some modifications for Seafile.

In the following discussion, we'll use "primary server" and "master server", "backup server" and "slave server" interchangeably.

Modify MySQL Server Configuration on Primary Server (my.cnf)

On the primary server, add following options to my.cnf:

```
[mysqld]
log_bin=mysql-bin
server-id=1
```

In the my.cnf of the primary server, another important option is `expire_logs_days` (reference). This option controls the retention time of the binary log, which is used for replication. The default value of this option is to keep binary log files forever. You can set this

option to keep the binary log files for specific days. Binary log files older than the specified days will be deleted. So if the backup server is offline for more than `expire_logs_days`, the replication cannot be resumed after the backup server is online. We recommend to set this option to a long enough time.

If you're using MariaDB Galera cluster as the primary database, you should only use one database node as the replication source. You should add the following option to the my.cnf of that chosen node:

```
[mysqld]
log_slave_updates=ON
```

This option tells MariaDB to replicate the updates from the nodes in the cluster. Otherwise it only replicates its local updates.

After saving the changes, you should restart MySQL on primary server.

Create a User for Replication in MySQL

On the primary server, create a user dedicated for replication. In MySQL client prompt,

```
CREATE USER 'repl'@'%' IDENTIFIED BY 'slavepass';
GRANT REPLICATION SLAVE ON *.* TO 'repl'@'%';
```

Replace the user name and password with your own choice.

Obtain the Replication Master Binary Log Coordinates

Before running this step, you should stop Seafile service on the primary server, so that no update will be written into database.

On the primary (Master) server, in MySQL client prompt,

```
FLUSH TABLES WITH READ LOCK;
SHOW MASTER STATUS;
```

You'll get output similar to the following:

```
+------------------+----------+--------------+------------------+-------------------+
| File             | Position | Binlog_Do_DB | Binlog_Ignore_DB | Executed_Gtid_Set |
+------------------+----------+--------------+------------------+-------------------+
| mysql-bin.000002 |   368915 |              |                  |                   |
+------------------+----------+--------------+------------------+-------------------+
```

The `File` and `Position` fields in output will be used to configure the backup server (replication Slave).

Export Existing Data on the Primary Server

Exporting data from the databases on the primary server with mysqldump:

```
mysqldump -u <user> -p<password> --databases \
--ignore-table=<seafile_db>.Repo --ignore-table=<seafile_db>.Branch --ignore-table=<se
afile_db>.RepoHead \
--ignore-table=<seahub_db>.base_userlastlogin --ignore-table=<seahub_db>.django_sessio
n \
--ignore-table=<seahub_db>.sysadmin_extra_userloginlog --ignore-table=<seahub_db>.User
TrafficStat \
--ignore-table=<seahub_db>.FileAudit --ignore-table=<seahub_db>.FileUpdate --ignore-ta
ble=<seahub_db>.PermAudit \
--ignore-table=<seahub_db>.Event --ignore-table=<seahub_db>.UserEvent --ignore-table=<
seahub_db>.avatar_avatar \
--ignore-table=<seahub_db>.avatar_groupavatar --ignore-table=<seahub_db>.avatar_upload
ed \
--master-data <seafile_db> <ccnet_db> <seahub_db> > dbdump.sql
```

You should replace `<user>` , `<password>` with your MySQL admin user and password. You should replace `<seafile_db>` , `<seahub_db>` and `<ccnet_db>` with your database names.

Modify MySQL Server Configuration on Backup Server (my.cnf)

On the backup server, add following options to my.cnf:

```
[mysqld]
server-id=2
replicate-ignore-table = <seafile db>.Repo
replicate-ignore-table = <seafile db>.Branch
replicate-ignore-table = <seafile db>.RepoHead
replicate-ignore-table = <seahub db>.base_userlastlogin
replicate-ignore-table = <seahub db>.django_session
replicate-ignore-table = <seahub db>.sysadmin_extra_userloginlog
replicate-ignore-table = <seahub db>.UserTrafficStat
replicate-ignore-table = <seahub db>.FileAudit
replicate-ignore-table = <seahub db>.FileUpdate
replicate-ignore-table = <seahub db>.PermAudit
replicate-ignore-table = <seahub db>.avatar_avatar
replicate-ignore-table = <seahub db>.avatar_groupavatar
replicate-ignore-table = <seahub db>.avatar_uploaded
replicate-ignore-table = <seahub db>.Event
replicate-ignore-table = <seahub db>.UserEvent
```

The above configuration tells the backup server to ignore following tables on replication:

- The library metadata tables in Seafile db：Repo, Branch, RepoHead。These tables will be synced by Seafile backup server itself.
- Local or temporary tables in Seahub database. When the admin logs into the backup server to view the data, these tables may be updated on the backup server. To avoid conflicts with the replicated entries, we ignore them on replication.

Notes:

- The `server-id` for the primary and backup server must be different.
- You should replace `<seafile db>` and `<seahub db>` with your database names.

Restart MySQL server on backup server, with `--skip-slave-start` option so that replication does not start.

```
sudo /etc/init.d/mysql start --skip-slave-start
```

Import Existing Data into backup server

Importing existing data into the backup server's MySQL:

```
mysql -u <usr> -p<pas> < dbdump.sql
```

Replace `<user>` and `<pass>` with your MySQL admin user name and password.

Start Replication

Unlock MySQL on the primary server. In MySQL client prompt,

```
unlock tables;
```

On the backup server, setup replication start coordinates:

```
CHANGE MASTER TO MASTER_HOST='primary-host', MASTER_USER='user', MASTER_PASSWORD='slav
epass', MASTER_LOG_FILE='bin-log-file', MASTER_LOG_POS=position;
```

Replace `primary-host` with the MySQL master server address; Replace `user` with the dedicated user for replication; Replace `slavepass` with the dedicated user's password; Replace `bin-log-file` and `position` with the information you obtained in the "Obtain the Replication Master Binary Log Coordinates" section.

Start replication on the backup server. In MySQL client prompt,

```
start slave;
```

After staring replication, you should see some log messages in MySQL's error.log on the backup server, stating the replication is started. And the slave will catch up with any new updates on the master server.

Configure Real-time Backup in Seafile

On the primary server, add following options to seafile.conf:

```
[backup]
backup_url = http://backup-server
sync_token = c7a78c0210c2470e14a20a8244562ab8ad509734
```

On the backup server, add following options to seafile.conf:

```
[backup]
primary_url = http://primary-server
sync_token = c7a78c0210c2470e14a20a8244562ab8ad509734
sync_poll_interval = 3
```

- `backup_url` : the backup server's address in url format. You can use http or https.
- `primary_url` : the primary server's address in url format.
- `sync_token` : a secret that shared between the primary and backup server. It's 40 character SHA1 generated by the system admin. You can use `uuidgen | openssl sha1` command to generate a random token.
- `sync_poll_interval` : The backup server polls all libraries of the primary server periodically. You can set the poll interval in the unit of hours. The default interval is 1 hour, which mean the backup server will poll the primary every hour. You should choose larger intervals if you have large number of libraries.

If you use https to sync between primary and backup servers, and you're using Debian or Ubuntu servers, you need to make some changes to your system CA store. Because the server package is built on CentOS 6, if you're using Debian/Ubuntu, you have to copy the system CA bundle to CentOS's CA bundle path. Otherwise Seafile can't find the CA bundle so that the SSL connection will fail.

```
sudo mkdir -p /etc/pki/tls/certs
sudo cp /etc/ssl/certs/ca-certificates.crt /etc/pki/tls/certs/ca-bundle.crt
sudo ln -s /etc/pki/tls/certs/ca-bundle.crt /etc/pki/tls/cert.pem
```

After saving the configuration, restart seafile service on the primary and backup servers. The backup server will automatically start backup on restart.

Setup Backup Server for Seafile Cluster

If your primary service runs as a Seafile cluster, you have two points to notice when setting up a backup server:

1. You should only use one MySQL instance as the replication master, if you're using MariaDB cluster.
2. You have to change seafile.conf and set the `backup_url` and `sync_token` options on each Seafile node. The configuration on all primary Seafile node should be the same. They all point to the same backup server.

Currently you cannot deploy the backup service **as** a cluster. That is, you can only use a single node as backup server. This support may be added in the future.

Managing the Real-time Backup Server

Once set up, the backup server is a fully working Seafile instance. The admin can manage the backup server in two ways:

1. Access the server via Seahub web interface, just like a normal Seafile instance.
2. Use the `seaf-backup-cmd.sh` script in the server package to manage the backup function.

The `seaf-backup-cmd.sh` script provides the following commands:

Checking Backup Status

`seaf-backup-cmd.sh` provides `status` command to view the backup status. The output is like:

```
# ./seaf-backup-cmd.sh status
Total number of libraries: xxx
Number of synchronized libraries: xxx
Number of libraries waiting for sync: xxx
Number of libraries syncing: xxx
Number of libraries failed to sync: xxx

List of syncing libraries:
xxx
xxx

List of libraries failed to sync:
xxx
xxx
```

There are a few reasons that may fail the backup of a library:

- Some data in the primary server is corrupted. The data may be in the latest state or in history. Since the backup procedure syncs the full history, corruption in history will fail

the backup.
  - The primary server has run seaf-fsck, which may restore a library back to an older state.

Manually Trigger Syncing a Library

You can use the `sync` command to manually schedule backup of a library:

```
# ./seaf-backup-cmd.sh sync <library id>
```

The command will block until the backup is finished.

Handling Backup Errors

The `--force` option of `sync` command can be used to force failing backup to complete. Permanent backup failures are usually caused by data corruption of a library in the primary server. The `--force` option asks the backup to skip corrupted objects and finish the backup.

When you find a backup error, follow two steps:

1. Run seaf-fsck on the primary server, for the failing libraries. Fsck fixes any corruption for the latest state of the libraries.
2. Run `seaf-backup-cmd.sh sync --force <library id>` on the backup server.

Restore from the Backup Server

Since the backup server is a fully workable Seafile instance, you can switch your service to the backup server after your primary is severely damaged. But you need to take a few points into consideration before switching to the backup server.

  - You should first try to repair the primary server as long as possible. Running seaf-fsck will fix most daily corruptions on the primary server.
  - Even with the near real-time feature of the backup server, the data on the backup server may still be a bit older than the primary server. This is especially true for the libraries failed to backup.

Before switching to the backup server, you should first unsync all clients which is syncing with "failed to backup" libraries.

Supposed the output of `seaf-backup-cmd.sh status` is as follows:

```
List of libraries failed to sync:
f690ea2c-fe4d-459a-ba1e-165cdc6df391
e2df70b5-cd80-496f-98cf-c9f038cf1307
```

You run the following command within MySQL on the backup server:

```
use seafile-db;
delete from RepoUserToken where repo_id in ('f690ea2c-fe4d-459a-ba1e-165cdc6df391', 'e
2df70b5-cd80-496f-98cf-c9f038cf1307');
```

Import Directory To Seafile

Since seafile 5.1.3 pro edition, we support importing a local directory on the server to seafile. It's a handy tool for the system admin to import files from existing file servers (NFS, Samba etc.).

To import a directory, use the `seaf-import.sh` script in seafile-server-latest directory.

```
usage :
seaf-import.sh
 -p <import dir path, must set>
 -n <repo name, must set>
 -u <repo owner, must set>
```

The specified directory will be imported into Seafile as a library. You can set the name and owner of the imported library.

Run `./seaf-import.sh -p <dir you want to import> -n <repo name> -u <repo owner>`,

```
Starting seaf-import, please wait ...
[04/26/16 03:36:23] seaf-import.c(79): Import file ./runtime/seahub.pid successfully.
[04/26/16 03:36:23] seaf-import.c(79): Import file ./runtime/error.log successfully.
[04/26/16 03:36:23] seaf-import.c(79): Import file ./runtime/seahub.conf successfully.
[04/26/16 03:36:23] seaf-import.c(79): Import file ./runtime/access.log successfully.
[04/26/16 03:36:23] seaf-import.c(183): Import dir ./runtime/ to repo 5ffb1f43 success
fully.
 run done
Done.
```

Login to seafile server with the specified library owner, you will find a new library with the specified name.

Web Resumable File Upload

When uploading a large file in the web interface, if the network is unreliable, the upload can be interrupted. It's convenient if the upload can be resumed from where it stopped last time. In Seafile Professional Server 4.4.0 and above, this feature is supported.

This feature works as following:

1. A user uploads a large file on the web interface, and the connection is interrupted after some part of the file has been uploaded.
2. The server remembers where the upload stopped.
3. When the same file is uploaded to the same library and folder, the server tells the browser where to start the upload.

Limitations:

1. Only supports resumble upload. File update and folder upload is not resumable.
2. Only supports Chrome, Firefox, IE 10+.

To enable this feature, add following options to seahub_settings.py:

```
ENABLE_RESUMABLE_FILEUPLOAD = True
```

In Seafile cluster, in order to make this feature work as espected, one of the following two special configurations must be done:

1. seafile-server-latest/seafile-data/httptemp folder should be shared amoung all front end Seafile Servers via NFS.
2. Or, configure the load balancer to always send requests from the same IP address to a fixed back end server.

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Server Configuration and Customization

Config Files

Important: Since Seafile Server 5.0.0, all config files are moved to the central **conf** folder. Read More.

There are three config files in the community edition:

- ccnet.conf: contains the LDAP settings
- seafile.conf: contains settings for seafile daemon and fileserver.
- seahub_settings.py: contains settings for Seahub

There is one additional config file in the pro edition:

- seafevents.conf: contains settings for search and documents preview

Note: Since version 5.0.0, you can also modify most of the config items via web interface.The config items are saved in database table (seahub-db/constance_config). They have a higher priority over the items in config files.

Common Customization Tasks

- Options for sending email
- Customize web inferface
- Desktop Client Cusomization
- User Management Options: refer to seahub_settings.py

- Quota and Download/Upload Limits: refer to seafile.conf

ccnet.conf

Note: Since Seafile Server 5.0.0, all config files are moved to the central **conf** folder. [Read More]().

Ccnet is the internal RPC framework used by Seafile server and also manages the user database. A few useful options are in ccnet.conf.

```
[General]

# Used internally. Don't delete.
ID=eb812fd276432eff33bcdde7506f896eb4769da0

# Used internally. Don't delete.
NAME=example

# This is outside URL for Seahub(Seafile Web).
# The domain part (i.e., www.example.com) will be used in generating share links and download/upload file via web.
# Note: Outside URL means "if you use Nginx, it should be the Nginx's address"
SERVICE_URL=http://www.example.com:8000


[Network]
# Not used anymore
PORT=10001

[Client]
# Not used anymore
PORT=13419
```

Note: You should restart seafile so that your changes take effect.

```
cd seafile-server
./seafile.sh restart
```

Changing MySQL Connection Pool Size

When you configure ccnet to use MySQL, the default connection pool size is 100, which should be enough for most use cases. You can change this value by adding following options to ccnet.conf:

```
[Database]
......
# Use larger connection pool
MAX_CONNECTIONS = 200
```

Seafile.conf settings

Note: Since Seafile Server 5.0.0, all config files are moved to the central **conf** folder. Read More.

Storage Quota Setting

You may set a default quota (e.g. 2GB) for all users. To do this, just add the following lines to `seafile.conf` file

```
[quota]
# default user quota in GB, integer only
default = 2
```

This setting applies to all users. If you want to set quota for a specific user, you may log in to seahub website as administrator, then set it in "System Admin" page.

Default history length limit

If you don't want to keep all file revision history, you may set a default history length limit for all libraries.

```
[history]
keep_days = days of history to keep
```

System Trash

Seafile uses a system trash, where deleted libraries will be moved to. In this way, accidentally deleted libraries can be recovered by system admin.

```
[library_trash]
# How often trashed libraries are scanned for removal, default 1
day.
scan_days = xx

# How many days to keep trashed libraries, default 30 days.
expire_days = xx
```

Seafile fileserver configuration

The configuration of seafile fileserver is in the `[fileserver]` section of the file `seafile.conf`

```
[fileserver]
# bind address for fileserver, default to 0.0.0.0
host = 0.0.0.0
# tcp port for fileserver
port = 8082
```

Since Community Edition 6.2 and Pro Edition 6.1.9, you can set the number of worker threads to server http requests. Default value is 10, which is a good value for most use cases.

```
[fileserver]
worker_threads = 15
```

Change upload/download settings.

```
[fileserver]
# Set maximum upload file size to 200M.
max_upload_size=200

# Set maximum download directory size to 200M.
max_download_dir_size=200
```

After a file is uploaded via the web interface, or the cloud file browser in the client, it needs to be divided into fixed size blocks and stored into storage backend. We call this procedure "indexing". By default, the file server uses 1 thread to sequentially index the file and store the blocks one by one. This is suitable for most cases. But if you're using S3/Ceph/Swift backends, you may have more bandwidth in the storage backend for storing multiple blocks in parallel. We provide an option to define the number of concurrent threads in indexing:

```
[fileserver]
max_indexing_threads = 10
```

When users upload files in the web interface (seahub), file server divides the file into fixed size blocks. Default blocks size for web uploaded files is 1MB. The block size can be set here.

```
[fileserver]
#Set block size to 2MB
fixed_block_size=2
```

When users upload files in the web interafece, file server assigns an token to authorize the upload operation. This token is valid for 1 hour by default. When uploading a large file via WAN, the upload time can be longer than 1 hour. You can change the token expire time to a larger value.

```
[fileserver]
#Set uploading time limit to 3600s
web_token_expire_time=3600
```

You can download a folder as a zip archive from seahub, but some zip software on windows doesn't support UTF-8, in which case you can use the "windows_encoding" settings to solve it.

```
[zip]
# The file name encoding of the downloaded zip file.
windows_encoding = iso-8859-1
```

Changing MySQL Connection Pool Size

When you configure seafile server to use MySQL, the default connection pool size is 100, which should be enough for most use cases. You can change this value by adding following options to seafile.conf:

```
[database]
......
# Use larger connection pool
max_connections = 200
```

Note: You need to restart seafile and seahub so that your changes take effect.

```
./seahub.sh restart
./seafile.sh restart
```

Change File Lock Auto Expire time (Pro edition only)

The Seafile Pro server auto expires file locks after some time, to prevent a locked file being locked for too long. The expire time can be tune in seafile.conf file.

```
[file_lock]
default_expire_hours = 6
```

The default is 12 hours.

Seahub Settings

Note: You can also modify most of the config items via web interface. The config items are saved in database table (seahub-db/constance_config). They have a higher priority over the items in config files. If you want to disable settings via web interface, you can add `ENABLE_SETTINGS_VIA_WEB = False` to `seahub_settings.py` .

Sending Email Notifications on Seahub

Refer to email sending documentation.

Memcached

Seahub caches items(avatars, profiles, etc) on file system by default(/tmp/seahub_cache/). You can replace with Memcached.

Refer to "add memcached".

User management options

The following options affect user registration, password and session.

```python
# Enalbe or disalbe registration on web. Default is `False`.
ENABLE_SIGNUP = False

# Activate or deactivate user when registration complete. Default is `True`.
# If set to `False`, new users need to be activated by admin in admin panel.
ACTIVATE_AFTER_REGISTRATION = False

# Whether to send email when a system admin adding a new member. Default is `True`.
SEND_EMAIL_ON_ADDING_SYSTEM_MEMBER = True

# Whether to send email when a system admin resetting a user's password. Default is `T
rue`.
SEND_EMAIL_ON_RESETTING_USER_PASSWD = True

# Remember days for login. Default is 7
LOGIN_REMEMBER_DAYS = 7

# Attempt limit before showing a captcha when login.
LOGIN_ATTEMPT_LIMIT = 3

# deactivate user account when login attempts exceed limit
# Since version 5.1.2 or pro 5.1.3
FREEZE_USER_ON_LOGIN_FAILED = False

# mininum length for user's password
USER_PASSWORD_MIN_LENGTH = 6

# LEVEL based on four types of input:
# num, upper letter, lower letter, other symbols
# '3' means password must have at least 3 types of the above.
USER_PASSWORD_STRENGTH_LEVEL = 3

# default False, only check USER_PASSWORD_MIN_LENGTH
# when True, check password strength level, STRONG(or above) is allowed
USER_STRONG_PASSWORD_REQUIRED = False

# Force user to change password when admin add/reset a user.
# Added in 5.1.1, deafults to True.
FORCE_PASSWORD_CHANGE = True

# Age of cookie, in seconds (default: 2 weeks).
SESSION_COOKIE_AGE = 60 * 60 * 24 * 7 * 2

# Whether a user's session cookie expires when the Web browser is closed.
SESSION_EXPIRE_AT_BROWSER_CLOSE = False

# Whether to save the session data on every request. Default is `False`
SESSION_SAVE_EVERY_REQUEST = False

# Whether enable personal wiki and group wiki. Default is `False`
# Since 6.1.0 CE
ENABLE_WIKI = True
```

Enable 'repo snapshot label' feature

ENABLE_REPO_SNAPSHOT_LABEL = False

Library options

Options for libraries:

```
# mininum length for password of encrypted library
REPO_PASSWORD_MIN_LENGTH = 8

# mininum length for password for share link (since version 4.4)
SHARE_LINK_PASSWORD_MIN_LENGTH = 8

# Disable sync with any folder. Default is `False`
# NOTE: since version 4.2.4
DISABLE_SYNC_WITH_ANY_FOLDER = True

# Enable or disable library history setting
ENABLE_REPO_HISTORY_SETTING = True

# Enable or disable normal user to create organization libraries
# Since version 5.0.5
ENABLE_USER_CREATE_ORG_REPO = True
```

Options for online file preview:

seahub_settings.py

```python
# Whether to use pdf.js to view pdf files online. Default is `True`,  you can turn it
off.
# NOTE: since version 1.4.
USE_PDFJS = True

# Online preview maximum file size, defaults to 30M.
# Note, this option controls files that can be previewed online, like pictures, txt, p
df.
# In pro edition, for preview doc/ppt/excel/pdf, there is another option `max-size`
# in seafevents.conf that controls the limit of files that can be previewed.
FILE_PREVIEW_MAX_SIZE = 30 * 1024 * 1024

# Extensions of previewed text files.
# NOTE: since version 6.1.1
TEXT_PREVIEW_EXT = """ac, am, bat, c, cc, cmake, cpp, cs, css, diff, el, h, html,
htm, java, js, json, less, make, org, php, pl, properties, py, rb,
scala, script, sh, sql, txt, text, tex, vi, vim, xhtml, xml, log, csv,
groovy, rst, patch, go"""

# Enable or disable thumbnails
# NOTE: since version 4.0.2
ENABLE_THUMBNAIL = True

# Seafile only generates thumbnails for images smaller than the following size.
THUMBNAIL_IMAGE_SIZE_LIMIT = 30 # MB

# Enable or disable thumbnail for video. ffmpeg and moviepy should be installed first.
# For details, please refer to https://manual.seafile.com/deploy/video_thumbnails.html
# NOTE: since version 6.1
ENABLE_VIDEO_THUMBNAIL = False

# Use the frame at 5 second as thumbnail
THUMBNAIL_VIDEO_FRAME_TIME = 5

# Absolute filesystem path to the directory that will hold thumbnail files.
THUMBNAIL_ROOT = '/haiwen/seahub-data/thumbnail/thumb/'

# Default size for picture preview. Enlarge this size can improve the preview quality.
# NOTE: since version 6.1.1
THUMBNAIL_SIZE_FOR_ORIGINAL = 1024
```

Cloud Mode

You should enable cloud mode if you use Seafile with an unknown user base. It disables the organization tab in Seahub's website to ensure that users can't access the user list. Cloud mode provides some nice features like sharing content with unregistered users and sending invitations to them. Therefore you also want to enable user registration. Through the global address book (since version 4.2.3) you can do a search for every user account. So you probably want to disable it.

```
# Enable cloude mode and hide `Organization` tab.
CLOUD_MODE = True


# Disable global address book
ENABLE_GLOBAL_ADDRESSBOOK = False
```

External authentication

```
# Enable authentication with ADFS
# Default is False
# Since 6.0.9
ENABLE_ADFS_LOGIN = True

# Enable authentication wit Kerberos
# Default is False
ENABLE_KRB5_LOGIN = True

# Enable authentication with Shibboleth
# Default is False
ENABLE_SHIBBOLETH_LOGIN = True
```

Other options

```python
# Disable settings via Web interface in system admin->settings
# Default is True
# Since 5.1.3
ENABLE_SETTINGS_VIA_WEB = False


# Choices can be found here:
# http://en.wikipedia.org/wiki/List_of_tz_zones_by_name
# although not all choices may be available on all operating systems.
# If running in a Windows environment this must be set to the same as your
# system time zone.
TIME_ZONE = 'UTC'


# Language code for this installation. All choices can be found here:
# http://www.i18nguy.com/unicode/language-identifiers.html
# Default language for sending emails.
LANGUAGE_CODE = 'en'


# Set this to your website/company's name. This is contained in email notifications an
d welcome message when user login for the first time.
SITE_NAME = 'Seafile'


# Browser tab's title
SITE_TITLE = 'Private Seafile'


# If you don't want to run seahub website on your site's root path, set this option to
 your preferred path.
# e.g. setting it to '/seahub/' would run seahub on http://example.com/seahub/.
SITE_ROOT = '/'


# Max number of files when user upload file/folder.
# Since version 6.0.4
MAX_NUMBER_OF_FILES_FOR_FILEUPLOAD = 500


# Control the language that send email. Default to user's current language.
# Since version 6.1.1
SHARE_LINK_EMAIL_LANGUAGE = ''


# Interval for browser requests unread notifications
# Since PRO 6.1.4 or CE 6.1.2
UNREAD_NOTIFICATIONS_REQUEST_INTERVAL = 3 * 60 # seconds
```

Pro edition only options

```python
# Whether to show the used traffic in user's profile popup dialog. Default is True
SHOW_TRAFFIC = True


# Allow administrator to view user's file in UNENCRYPTED libraries
# through Libraries page in System Admin. Default is False.
ENABLE_SYS_ADMIN_VIEW_REPO = True


# For un-login users, providing an email before downloading or uploading on shared lin
k page.
# Since version 5.1.4
ENABLE_SHARE_LINK_AUDIT = True


# Check virus after upload files to shared upload links. Defaults to `False`.
# Since version 6.0
ENABLE_UPLOAD_LINK_VIRUS_CHECK = True


# Enable system admin add T&C, all users need to accept terms before using. Defaults t
o `False`.
# Since version 6.0
ENABLE_TERMS_AND_CONDITIONS = True


# Enable two factor authentication for accounts. Defaults to `False`.
# Since version 6.0
ENABLE_TWO_FACTOR_AUTH = True


# Enable user select a template when he/she creates library.
# When user select a template, Seafile will create folders releated to the pattern aut
omaticly.
# Since version 6.0
LIBRARY_TEMPLATES = {
    'Technology': ['/Develop/Python', '/Test'],
    'Finance': ['/Current assets', '/Fixed assets/Computer']
}


# Send email to these email addresses when a virus is detected.
# This list can be any valid email address, not necessarily the emails of Seafile user.

# Since version 6.0.8
VIRUS_SCAN_NOTIFY_LIST = ['user_a@seafile.com', 'user_b@seafile.com']
```

RESTful API

```
# API throttling related settings. Enlarger the rates if you got 429 response code dur
ing API calls.
REST_FRAMEWORK = {
    'DEFAULT_THROTTLE_RATES': {
        'ping': '600/minute',
        'anon': '5/minute',
        'user': '300/minute',
    },
    'UNICODE_JSON': False,
}


# Throtting whitelist used to disable throttle for certain IPs.
# e.g. REST_FRAMEWORK_THROTTING_WHITELIST = ['127.0.0.1', '192.168.1.1']
# Please make sure `REMOTE_ADDR` header is configured in Nginx conf according to https
://manual.seafile.com/deploy/deploy_with_nginx.html.
REST_FRAMEWORK_THROTTING_WHITELIST = []
```

Seahub Custom Functions

Since version 6.2, you can define a custome function to modify the result of user search function.

For example, if you want to limit user only search users in the same institution, you can define `custom_search_user` function in `{seafile install path}/conf/seahub_custom_functions/__init__.py`

Code example:

seahub_settings.py

```python
import os
import sys

current_path = os.path.dirname(os.path.abspath(__file__))
seahub_dir = os.path.join(current_path, \
        '../../seafile-server-latest/seahub/seahub')
sys.path.append(seahub_dir)


from seahub.profile.models import Profile
def custom_search_user(request, emails):

    institution_name = ''

    username = request.user.username
    profile = Profile.objects.get_profile_by_user(username)
    if profile:
        institution_name = profile.institution

    inst_users = [p.user for p in
            Profile.objects.filter(institution=institution_name)]

    filtered_emails = []
    for email in emails:
        if email in inst_users:
            filtered_emails.append(email)

    return filtered_emails
```

> **NOTE**, you should NOT change the name of `custom_search_user` and
> `seahub_custom_functions/__init__.py`

Note

- You need to restart seahub so that your changes take effect.
- If your changes don't take effect, You may need to delete 'seahub_setting.pyc'. (A cache file)

```
./seahub.sh restart
```

Configurable Options

Note: Since Seafile Server 5.0.0, all config files have been moved to the central **conf** folder. Read More.

In the file `seafevents.conf` :

```
[AUDIT]
## Audit log is disabled default.
## Leads to additional SQL tables being filled up, make sure your SQL server is able to handle it.
enabled = true

[INDEX FILES]
## must be "true" to enable search
enabled = true

## The interval the search index is updated. Can be s(seconds), m(minutes), h(hours), d(days)
interval=10m

## If true, indexes the contents of office/pdf files while updating search index
## Note: If you change this option from "false" to "true", then you need to clear the search index and update the index again.
## Refer to file search manual for details.
index_office_pdf=false

## The default size limit for doc, docx, ppt, pptx, xls, xlsx and pdf files. Files larger than this will not be indexed.
## Since version 6.2.0
## Unit: MB
office_file_size_limit = 10

[SEAHUB EMAIL]

## must be "true" to enable user email notifications when there are new unread notifications
enabled = true

## interval of sending Seahub email. Can be s(seconds), m(minutes), h(hours), d(days)
interval = 30m


[OFFICE CONVERTER]

## must be "true" to enable office/pdf online preview
enabled = true

## how many libreoffice worker processes should run concurrenlty
workers = 1
```

```
## where to store the converted office/pdf files. Deafult is /tmp/.
outputdir = /tmp/

## how many pages are allowed to be previewed online. Default is 50 pages
max-pages = 50

## the max size of documents allowed to be previewed online, in MB. Default is 2 MB
## Previewing a large file (for example >30M) online is likely going to freeze the bro
wser.
max-size = 2
```

Options you may want to modify

The section above listed all the options in `seafevents.conf` . Most of the time you can use the default settings. But you may want to modify some of them to fit your own use case.

We list them in the following table, as well as why we choose the default value.

section	option	default value	description
INDEX FILES	index_office_pdf	false	The full text search of office/pdf documents is not enabled by default. This is because it may consume quite some storage for the search index. To turn it on, set this value to "true" and recreate the search index. See [File Search Details] (details_about_file_search.md) for details.
OFFICE CONVERTER	max-size	2	The max file size allowed to be previewed online is 2MB. The preview is converted for office/pdf files as HTML and display it in the browser. If the file size is too large, the conversion could take too much time and consume many resources.
OFFICE CONVERTER	max-pages	50	When previewing an office/pdf document online, the pages displayed are the first 50 pages. If the value is too large, the conversion may take too much time and consume too many resources. Furthermore the browser can crash.

Seahub customization

Customize Seahub Logo and CSS

Create a folder `<seafile-install-path>/seahub-data/custom` . Create a symbolic link in `seafile-server-latest/seahub/media` by `ln -s ../../../seahub-data/custom custom` .

During upgrading, Seafile upgrade script will create symbolic link automatically to preserve your customization.

Customize Logo

1. Add your logo file to `custom/`
2. Overwrite `LOGO_PATH` in `seahub_settings.py`

```
LOGO_PATH = 'custom/mylogo.png'
```

3. Default width and height for logo is 149px and 32px, you may need to change that according to yours.

```
LOGO_WIDTH = 149
LOGO_HEIGHT = 32
```

Customize Favicon

1. Add your favicon file to `custom/`
2. Overwrite `FAVICON_PATH` in `seahub_settings.py`

```
FAVICON_PATH = 'custom/favicon.png'
```

Customize Seahub CSS

1. Add your css file to `custom/` , for example, `custom.css`
2. Overwrite `BRANDING_CSS` in `seahub_settings.py`

```
BRANDING_CSS = 'custom/custom.css'
```

You can find a good example of customized css file here:

https://github.com/focmb/seafile_custom_css_green

Customize footer and other Seahub Pages

Note: Since version 2.1.

Create a folder `templates` under `<seafile-install-path>/seahub-data/custom`

Customize footer (not used since 6.0.0)

Note: Since version 6.0, Seafile uses a full screen adaptive design, footer is removed.

1. Copy `seahub/seahub/templates/footer.html` to `seahub-data/custom/templates` .
2. Modify `footer.html` .

Customize Download page

1. Copy `seahub/seahub/templates/download.html` to `seahub-data/custom/templates` .
2. Modify `download.html` .

Customize Help page

1. Copy `seahub/seahub/help/templates/help` to `seahub-data/custom/templates/help` .
2. Modify pages under `help` .

Seafile Desktop customization

Customize the logo and name displayed on seafile desktop clients (Seafile Professional Only)

Note: The feature is only available in seafile desktop client 4.4.0 and later.

By default, the text "Seafile" is displayed in the top of seafile desktop client window, along side with the seafile logo. To customize them, set `DESKTOP_CUSTOM_LOGO` and `DESKTOP_CUSTOM_BRAND` in `seahub_settings.py` .
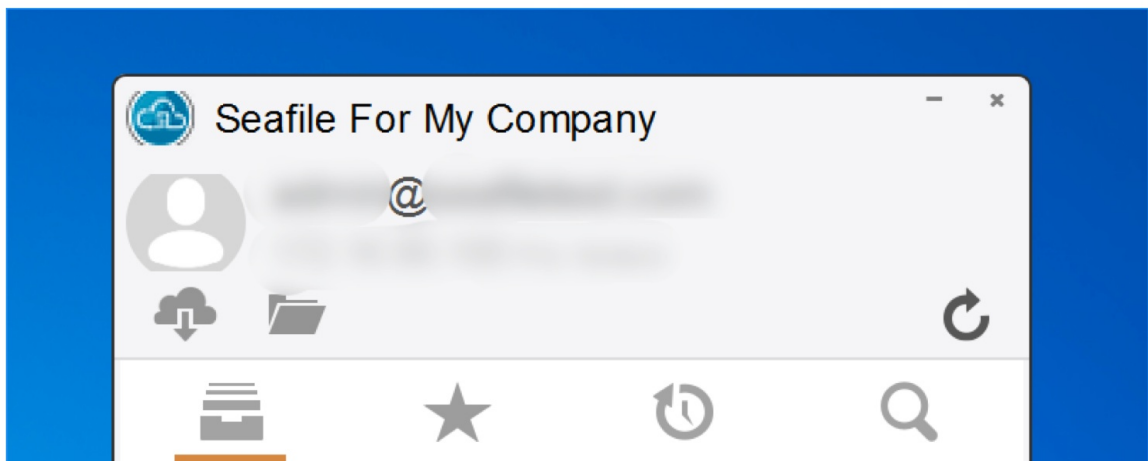
The size of the image must be `24x24` , and generally you should put it in the `custom` folder.

```
DESKTOP_CUSTOM_LOGO = 'custom/desktop-custom-logo.png'
DESKTOP_CUSTOM_BRAND = 'Seafile For My Company'
```

Auto Install Seafile Client on All Windows PCs

You can setup a group policy object (GPO) in your Windows Domain Controller to auto install seafile client on all Windows PCs in your company network. The Seafile client is provided as an MSI installer. So you just need to following the instructioin on Microsoft's documentation to auto install the client.

Preconfigure Seafile Client for All Windows PCs

Some behavior of the Seafile client can be configured via registry entries on Windows. So it's possible to control the client's behavior in a centralized way, via group policy objects (GPO).

The registry entries used to configure Seafile client are described in this documentation. To setup GPO to set these registry entries on Windows, please refer to Microsoft's documentation.

Sending Email Notifications on Seahub

Types of Email Sending in Seafile

There are currently five types of emails sent in Seafile:

- User reset his/her password
- System admin add new member
- System admin reset user password
- User send file/folder share link and upload link
- [pro] Reminder of unread notifications (It is sent by a background task which is pro edition only)

The first four types of email are sent immediately. The last type is sent by a background task running periodically.

Options of Email Sending

Please add the following lines to seahub_settings.py to enable email sending.

```
EMAIL_USE_TLS = False
EMAIL_HOST = 'smtp.example.com'          # smpt server
EMAIL_HOST_USER = 'username@example.com'     # username and domain
EMAIL_HOST_PASSWORD = 'password'     # password
EMAIL_PORT = 25
DEFAULT_FROM_EMAIL = EMAIL_HOST_USER
SERVER_EMAIL = EMAIL_HOST_USER
```

If you are using Gmail as email server, use following lines:

```
EMAIL_USE_TLS = True
EMAIL_HOST = 'smtp.gmail.com'
EMAIL_HOST_USER = 'username@gmail.com'
EMAIL_HOST_PASSWORD = 'password'
EMAIL_PORT = 587
DEFAULT_FROM_EMAIL = EMAIL_HOST_USER
SERVER_EMAIL = EMAIL_HOST_USER
```

Note: If your email service still does not work, you can checkout the log file `logs/seahub.log` to see what may cause the problem. For a complete email notification list, please refer to email notification list.

Note2: If you want to use the email service without authentication leaf `EMAIL_HOST_USER` and `EMAIL_HOST_PASSWORD` **blank** (`''`). (But notice that the emails then will be sent without a `From:` address.)

Note3: About using SSL connection (using port 465)

Port 587 is being used to establish a TLS connection and port 465 is being used to establish an SSL connection. Starting from Django 1.8, it supports both. Until version 5.1 Seafile only supported Django 1.5, which only supports TLS connections. If your email server only supports SSL connections and you are using a Seafile Server version below 5.1, you can find a workaround here: django-smtp-ssl.

Change the `sender` and `reply to` of email

You can change the sender and reply to field of email by add the following settings to seahub_settings.py. This only affects email sending for file share link.

```
# Replace default from email with user's email or not, defaults to ``False``
REPLACE_FROM_EMAIL = True

# Set reply-to header to user's email or not, defaults to ``False``. For details,
# please refer to http://www.w3.org/Protocols/rfc822/
ADD_REPLY_TO_HEADER = True
```

Config background email sending task (Pro Edition Only)

The background task will run periodically to check whether an user have new unread notifications. If there are any, it will send a reminder email to that user. The background email sending task is controlled by `seafevents.conf` .

```
[SEAHUB EMAIL]

## must be "true" to enable user email notifications when there are new unread notific
ations
enabled = true

## interval of sending seahub email. Can be s(seconds), m(minutes), h(hours), d(days)
interval = 30m
```

Customize email messages

The simplest way to customize the email message is setting the `SITE_NAME` variable in seahub_settings.py. If it is not enough for your case, you can customize the email templates.

Note: Subject line may vary between different releases, this is based on Release 5.0.0. Restart Seahub so that your changes take effect.

The email base template

seahub/seahub/templates/email_base.html

Note: You can copy email_base.html to `seahub-data/custom/templates/email_base.html` and modify the new one. In this way, the customization will be maintained after upgrade.

User reset his/her password

Subject

seahub/seahub/auth/forms.py line:127

```
        send_html_email(_("Reset Password on %s") % site_name,
                email_template_name, c, None, [user.username])
```

Body

seahub/seahub/templates/registration/password_reset_email.html

Note: You can copy password_reset_email.html to `seahub-data/custom/templates/registration/password_reset_email.html` and modify the new one. In this way, the customization will be maintained after upgrade.

System admin add new member

Subject

seahub/seahub/views/sysadmin.py line:424

```
  send_html_email(_(u'Password has been reset on %s') % SITE_NAME,
            'sysadmin/user_reset_email.html', c, None, [email])
```

Body

seahub/seahub/templates/sysadmin/user_add_email.html

Note: You can copy user_add_email.html to `seahub-data/custom/templates/sysadmin/user_add_email.html` and modify the new one. In this way, the customization will be maintained after upgrade.

System admin reset user password

Subject

seahub/seahub/views/sysadmin.py line:1224

```
send_html_email(_(u'Password has been reset on %s') % SITE_NAME,
          'sysadmin/user_reset_email.html', c, None, [email])
```

Body

seahub/seahub/templates/sysadmin/user_reset_email.html

Note: You can copy user_reset_email.html to `seahub-data/custom/templates/sysadmin/user_reset_email.html` and modify the new one. In this way, the customization will be maintained after upgrade.

User send file/folder share link

Subject

seahub/seahub/share/views.py line:913

```
try:
    if file_shared_type == 'f':
        c['file_shared_type'] = _(u"file")
        send_html_email(_(u'A file is shared to you on %s') % SITE_NAME,
                        'shared_link_email.html',
                        c, from_email, [to_email],
                        reply_to=reply_to
                        )
    else:
        c['file_shared_type'] = _(u"directory")
        send_html_email(_(u'A directory is shared to you on %s') % SITE_NAME,
                        'shared_link_email.html',
                        c, from_email, [to_email],
                        reply_to=reply_to)
```

Body

seahub/seahub/templates/shared_link_email.html

seahub/seahub/templates/shared_upload_link_email.html

Note: You can copy shared_link_email.html to `seahub-data/custom/templates/shared_link_email.html` and modify the new one. In this way, the customization will be maintained after upgrade.

Reminder of unread notifications

Subject

```
send_html_email(_('New notice on %s') % settings.SITE_NAME,
                                'notifications/notice_email.html', c,
                                None, [to_user])
```
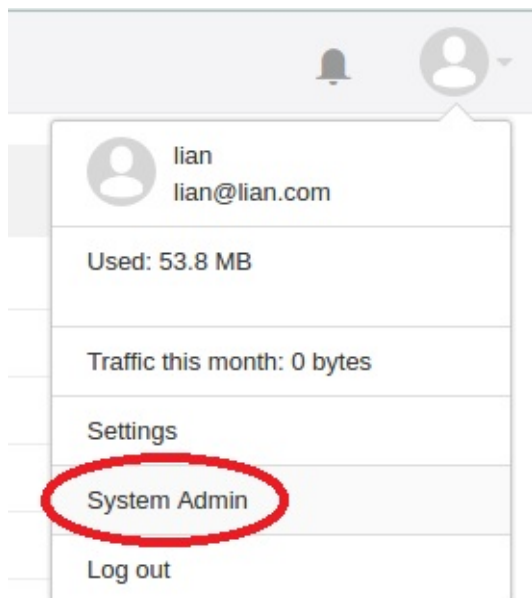
Body

seahub/seahub/notifications/templates/notifications/notice_email.html
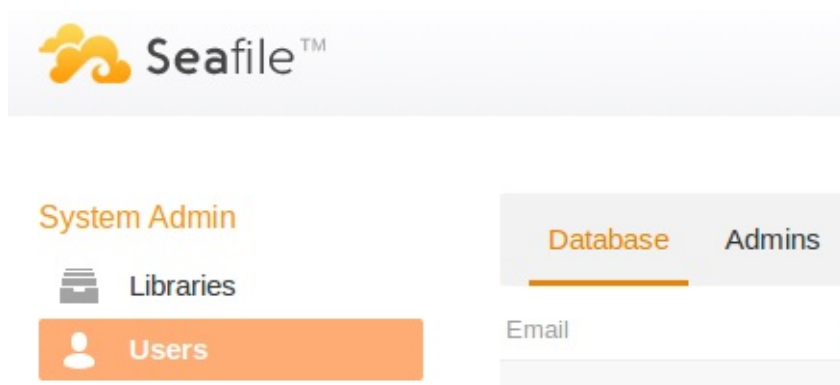
Administration

Enter the admin panel

As the system admin, you can enter the admin panel by click `System Admin` in the popup of avatar if you are using 6.0.0 or above:

If your Seafile version is below 6.0.0, you can enter the admin panel by click the `tools` button at the top-right, beside the avatar:

After clicking the button, you will get into the admin panel:

Account management

- Account management

Logs

- The location of log files

Backup and Recovery

Backup and recovery:

- Backup and recovery

Recover corrupt files after server hard shutdown or system crash:

- Seafile FSCK

You can run Seafile GC to remove unused files:

- Seafile GC

Clean database

- Clean database

Account Management

User Management

When you setup seahub website, you should have setup a admin account. After you logged in a admin, you may add/delete users and file libraries.

Resetting User Password

Administrator can reset password for a user in "System Admin" page.

In a private server, the default settings doesn't support users to reset their password by email. If you want to enable this, you have first to set up notification email.

Forgot Admin Account or Password?

You may run `reset-admin.sh` script under seafile-server directory. This script would help you reset the admin account and password.

Logs

Log files of seafile server:

- seafile.log: logs of Seafile server
- controller.log: logs of Controller
- seahub_django_request.log: logs of Seahub
- seahub.log: logs from Django framework and emails sending
- Ccnet Log: logs/ccnet.log (logs for internal RPC, not useful)

pro edition only:

- seafevents.log: logs for background tasks and office file convertion
- seahub_email_sender.log: logs for periodically email sending of background tasks

Log files for seafile background node in cluster mode:

- seafile.log: logs of Seafile server
- controller.log: logs of Controller
- seahub_django_request.log: logs of Seahub
- seahub.log: logs from Django framework and emails sending
- seafevents.log: Empty
- seafile-background-tasks.log: logs for background tasks and office file convertion
- seahub_email_sender.log: logs for periodically email sending of background tasks
- Ccnet Log: logs/ccnet.log (logs for internal RPC, not useful)

Overview

There are generally two parts of data to backup

- Seafile library data
- Databases

If you setup seafile server according to our manual, you should have a directory layout like:

```
haiwen          # Replace the name with your organization name
  --seafile-server-2.x.x # untar from seafile package
  --seafile-data   # seafile configuration and data (if you choose the default)
  --seahub-data    # seahub data
  --ccnet          # ccnet configuration and data
  --seahub.db      # sqlite3 database used by seahub
  --seahub_settings.py # optional config file for seahub
```

All your library data is stored under the 'haiwen' directory.

Seafile also stores some important metadata data in a few databases. The names and locations of these databases depends on which database software you use.

For SQLite, the database files are also under the 'haiwen' directory. The locations are:

- ccnet/PeerMgr/usermgr.db: contains user information
- ccnet/GroupMgr/groupmgr.db: contains group information
- seafile-data/seafile.db: contains library metadata
- seahub.db: contains tables used by the web front end (seahub)

For MySQL, the databases are created by the administrator, so the names can be different from one deployment to another. There are 3 databases:

- ccnet-db: contains user and group information
- seafile-db: contains library metadata
- seahub.db: contains tables used by the web front end (seahub)

Backup steps

The backup is a three step procedure:

1. Optional: Stop Seafile server first if you're using SQLite as database.
2. Backup the databases;
3. Backup the seafile data directory;

Backup Order: Database First or Data Directory First

- backup data directory first, SQL later: When you're backing up data directory, some new objects are written and they're not backed up. Those new objects may be referenced in SQL database. So when you restore, some records in the database cannot find its object. So the library is corrupted.
- backup SQL first, data directory later: Since you backup database first, all records in the database have valid objects to be referenced. So the libraries won't be corrupted. But new objects written to storage when you're backing up are not referenced by database records. So some libraries are out of date. When you restore, some new data are lost.

The second sequence is better in the sense that it avoids library corruption. Like other backup solutions, some new data can be lost in recovery. There is always a backup window. However, if your storage backup mechanism can finish quickly enough, using the first sequence can retain more data.

We assume your seafile data directory is in `/data/haiwen` . And you want to backup to `/backup` directory. The `/backup` can be an NFS or Windows share mount exported by another machine, or just an external disk. You can create a layout similar to the following in `/backup` directory:

```
/backup
---- databases/  contains database backup files
---- data/  contains backups of the data directory
```

Backing up Databases

It's recommended to backup the database to a separate file each time. Don't overwrite older database backups for at least a week.

MySQL

Assume your database names are `ccnet-db` , `seafile-db` and `seahub-db` . mysqldump automatically locks the tables so you don't need to stop Seafile server when backing up MySQL databases. Since the database tables are usually very small, it won't take long to dump.

```
mysqldump -h [mysqlhost] -u[username] -p[password] --opt ccnet-db > /backup/databases/
ccnet-db.sql.`date +"%Y-%m-%d-%H-%M-%S"`

mysqldump -h [mysqlhost] -u[username] -p[password] --opt seafile-db > /backup/database
s/seafile-db.sql.`date +"%Y-%m-%d-%H-%M-%S"`

mysqldump -h [mysqlhost] -u[username] -p[password] --opt seahub-db > /backup/databases
/seahub-db.sql.`date +"%Y-%m-%d-%H-%M-%S"`
```

SQLite

You need to stop Seafile server first before backing up SQLite database.

```
sqlite3 /data/haiwen/ccnet/GroupMgr/groupmgr.db .dump > /backup/databases/groupmgr.db.
bak.`date +"%Y-%m-%d-%H-%M-%S"`

sqlite3 /data/haiwen/ccnet/PeerMgr/usermgr.db .dump > /backup/databases/usermgr.db.bak
.`date +"%Y-%m-%d-%H-%M-%S"`

sqlite3 /data/haiwen/seafile-data/seafile.db .dump > /backup/databases/seafile.db.bak.
`date +"%Y-%m-%d-%H-%M-%S"`

sqlite3 /data/haiwen/seahub.db .dump > /backup/databases/seahub.db.bak.`date +"%Y-%m-%
d-%H-%M-%S"`
```

Backing up Seafile library data

The data files are all stored in the `/data/haiwen` directory, so just back up the whole directory. You can directly copy the whole directory to the backup destination, or you can use rsync to do incremental backup.

To directly copy the whole data directory,

```
cp -R /data/haiwen /backup/data/haiwen-`date +"%Y-%m-%d-%H-%M-%S"`
```

This produces a separate copy of the data directory each time. You can delete older backup copies after a new one is completed.

If you have a lot of data, copying the whole data directory would take long. You can use rsync to do incremental backup.

```
rsync -az /data/haiwen /backup/data
```

This command backup the data directory to `/backup/data/haiwen`.

Restore from backup

Now supposed your primary seafile server is broken, you're switching to a new machine. Using the backup data to restore your Seafile instance:

1. Copy `/backup/data/haiwen` to the new machine. Let's assume the seafile deployment location new machine is also `/data/haiwen`.
2. Restore the database.
3. Since database and data are backed up separately, they may become a little inconsistent with each other. To correct the potential inconsistency, run seaf-fsck tool to check data integrity on the new machine. See seaf-fsck documentation.

Restore the databases

Now with the latest valid database backup files at hand, you can restore them.

MySQL

```
mysql -u[username] -p[password] ccnet-db < ccnet-db.sql.2013-10-19-16-00-05
mysql -u[username] -p[password] seafile-db < seafile-db.sql.2013-10-19-16-00-20
mysql -u[username] -p[password] seahub-db < seahub-db.sql.2013-10-19-16-01-05
```

SQLite

```
cd /data/haiwen
mv ccnet/PeerMgr/usermgr.db ccnet/PeerMgr/usermgr.db.old
mv ccnet/GroupMgr/groupmgr.db ccnet/GroupMgr/groupmgr.db.old
mv seafile-data/seafile.db seafile-data/seafile.db.old
mv seahub.db seahub.db.old
sqlite3 ccnet/PeerMgr/usermgr.db < usermgr.db.bak.xxxx
sqlite3 ccnet/GroupMgr/groupmgr.db < groupmgr.db.bak.xxxx
sqlite3 seafile-data/seafile.db < seafile.db.bak.xxxx
sqlite3 seahub.db < seahub.db.bak.xxxx
```

Seafile FSCK

On the server side, Seafile stores the files in the libraries in an internal format. Seafile has its own representation of directories and files (similar to Git).

With default installation, these internal objects are stored in the server's file system directly (such as Ext4, NTFS). But most file systems don't assure the integrity of file contents after a hard shutdown or system crash. So if new Seafile internal objects are being written when the system crashes, they can be corrupt after the system reboots. This will make part of the corresponding library not accessible.

Note: If you store the seafile-data directory in a battery-backed NAS (like EMC or NetApp), or use S3 backend available in the Pro edition, the internal objects won't be corrupt.

Starting from version 2.0, Seafile server comes with a seaf-fsck tool to help you recover from this corruption (similar to git-fsck tool). This tool recovers any corrupted library back to its last consistent and usable state.

Starting from version 4.1, we provide a seaf-fsck.sh script. The seaf-fsck tool accepts the following arguments:

```
cd seafile-server-latest
./seaf-fsck.sh [--repair|-r] [--export|-E export_path] [repo_id_1 [repo_id_2 ...]]
```

There are three modes of operation for seaf-fsck:

1. checking integrity of libraries.
2. repairing corrupted libraries.
3. exporting libraries.

Checking Integrity of Libraries

Running seaf-fsck.sh without any arguments will run a **read-only** integrity check for all libraries.

```
cd seafile-server-latest
./seaf-fsck.sh
```

If you want to check integrity for specific libraries, just append the library id's as arguments:

```
cd seafile-server-latest
./seaf-fsck.sh [library-id1] [library-id2] ...
```

The output looks like:

```
[02/13/15 16:21:07] fsck.c(470): Running fsck for repo ca1a860d-e1c1-4a52-8123-0bf9def
8697f.
[02/13/15 16:21:07] fsck.c(413): Checking file system integrity of repo fsck(ca1a860d)
...
[02/13/15 16:21:07] fsck.c(35): Dir 9c09d937397b51e1283d68ee7590cd9ce01fe4c9 is missin
g.
[02/13/15 16:21:07] fsck.c(200): Dir /bf/pk/(9c09d937) is curropted.
[02/13/15 16:21:07] fsck.c(105): Block 36e3dd8757edeb97758b3b4d8530a4a8a045d3cb is cor
rupted.
[02/13/15 16:21:07] fsck.c(178): File /bf/02.1.md(ef37e350) is curropted.
[02/13/15 16:21:07] fsck.c(85): Block 650fb22495b0b199cff0f1e1ebf036e548fcb95a is miss
ing.
[02/13/15 16:21:07] fsck.c(178): File /01.2.md(4a73621f) is curropted.
[02/13/15 16:21:07] fsck.c(514): Fsck finished for repo ca1a860d.
```

The corrupted files and directories are reported.

Sometimes you can see output like the following:

```
[02/13/15 16:36:11] Commit 6259251e2b0dd9a8e99925ae6199cbf4c134ec10 is missing
[02/13/15 16:36:11] fsck.c(476): Repo ca1a860d HEAD commit is corrupted, need to resto
re to an old version.
[02/13/15 16:36:11] fsck.c(314): Scanning available commits...
[02/13/15 16:36:11] fsck.c(376): Find available commit 1b26b13c(created at 2015-02-13
16:10:21) for repo ca1a860d.
```

This means the "head commit" (current state of the library) recorded in database is not consistent with the library data. In such case, fsck will try to find the last consistent state and check the integrity in that state.

Tips: **If you have many libraries, it's helpful to save the fsck output into a log file for later analysis.**

Repairing Corruption

Corruption repair in seaf-fsck basically works in two steps:

1. If the library state (commit) recorded in database is not found in data directory, find the last available state from data directory.
2. Check data integrity in that specific state. If files or directories are corrupted, set them to empty files or empty directories. The corrupted paths will be reported, so that the user can recover them from somewhere else.

Running the following command repairs all the libraries:

```
cd seafile-server-latest
./seaf-fsck.sh --repair
```

Most of time you run the read-only integrity check first, to find out which libraries are corrupted. And then you repair specific libraries with the following command:

```
cd seafile-server-latest
./seaf-fsck.sh --repair [library-id1] [library-id2] ...
```

After repairing, in the library history, seaf-fsck includes the list of files and folders that are corrupted. So it's much easier to located corrupted paths.

Best Practice for Repairing a Library

To check all libraries and find out which library is corrupted, the system admin can run seaf-fsck.sh without any argument and save the output to a log file. Search for keyword "Fail" in the log file to locate corrupted libraries. You can run seaf-fsck to check all libraries when your Seafile server is running. It won't damage or change any files.

When the system admin find a library is corrupted, he/she should run seaf-fsck.sh with "--repair" for the library. After the command fixes the library, the admin should inform user to recover files from other places. There are two ways:

- Upload corrupted files or folders via the web interface
- If the library was synced to some desktop computer, and that computer has a correct version of the corrupted file, resyncing the library on that computer will upload the corrupted files to the server.

Exporting Libraries to File System

Since version 4.2.0, you can use seaf-fsck to export all the files in libraries to external file system (such as Ext4). This procedure doesn't rely on the seafile database. As long as you have your seafile-data directory, you can always export your files from Seafile to external file system.

The command syntax is

```
cd seafile-server-latest
./seaf-fsck.sh --export top_export_path [library-id1] [library-id2] ...
```

The argument `top_export_path` is a directory to place the exported files. Each library will be exported as a sub-directory of the export path. If you don't specify library ids, all libraries will be exported.

Currently only un-encrypted libraries can be exported. Encrypted libraries will be skipped.

Currently only un-encrypted libraries can be exported. Encrypted libraries will be skipped.

Seafile GC

Seafile uses storage de-duplication technology to reduce storage usage. The underlying data blocks will not be removed immediately after you delete a file or a library. As a result, the number of unused data blocks will increase on Seafile server.

To release the storage space occupied by unused blocks, you have to run a "garbage collection" program to clean up unused blocks on your server.

The GC program cleans up two types of unused blocks:

1. Blocks that no library references to, that is, the blocks belong to deleted libraries;
2. If you set history length limit on some libraries, the out-dated blocks in those libraries will also be removed.

Before running GC, you must shutdown the Seafile program on your server if you use the community edition. For professional edition, from version 3.1.11, online GC operation is supported. If you use Professional edition, you don't need to shutdown the Seafile program if you are using MySQL or PostgreSQL as database.
This is because new blocks written into Seafile while GC is running may be mistakenly deleted by the GC program.

Community version - GC cleanup Script

At the bottom of the page there is a script that you can use to run the cleanup manually or e.g. once a week with as cronjob.

Run GC in version 4.1.1 and later

In community edition 4.1.1 and Pro edition 4.1.0, GC program's command line and output are improved.

Dry-run Mode

To see how much garbage can be collected without actually removing any garbage, use the dry-run option:

```
seaf-gc.sh --dry-run [repo-id1] [repo-id2] ...
```

The output should look like:

```
[03/19/15 19:41:49] seafserv-gc.c(115): GC version 1 repo My Library(ffa57d93)
[03/19/15 19:41:49] gc-core.c(394): GC started. Total block number is 265.
[03/19/15 19:41:49] gc-core.c(75): GC index size is 1024 Byte.
[03/19/15 19:41:49] gc-core.c(408): Populating index.
[03/19/15 19:41:49] gc-core.c(262): Populating index for repo ffa57d93.
[03/19/15 19:41:49] gc-core.c(308): Traversed 5 commits, 265 blocks.
[03/19/15 19:41:49] gc-core.c(440): Scanning unused blocks.
[03/19/15 19:41:49] gc-core.c(472): GC finished. 265 blocks total, about 265 reachable
 blocks, 0 blocks can be removed.

[03/19/15 19:41:49] seafserv-gc.c(115): GC version 1 repo aa(f3d0a8d0)
[03/19/15 19:41:49] gc-core.c(394): GC started. Total block number is 5.
[03/19/15 19:41:49] gc-core.c(75): GC index size is 1024 Byte.
[03/19/15 19:41:49] gc-core.c(408): Populating index.
[03/19/15 19:41:49] gc-core.c(262): Populating index for repo f3d0a8d0.
[03/19/15 19:41:49] gc-core.c(308): Traversed 8 commits, 5 blocks.
[03/19/15 19:41:49] gc-core.c(264): Populating index for sub-repo 9217622a.
[03/19/15 19:41:49] gc-core.c(308): Traversed 4 commits, 4 blocks.
[03/19/15 19:41:49] gc-core.c(440): Scanning unused blocks.
[03/19/15 19:41:49] gc-core.c(472): GC finished. 5 blocks total, about 9 reachable blo
cks, 0 blocks can be removed.

[03/19/15 19:41:49] seafserv-gc.c(115): GC version 1 repo test2(e7d26d93)
[03/19/15 19:41:49] gc-core.c(394): GC started. Total block number is 507.
[03/19/15 19:41:49] gc-core.c(75): GC index size is 1024 Byte.
[03/19/15 19:41:49] gc-core.c(408): Populating index.
[03/19/15 19:41:49] gc-core.c(262): Populating index for repo e7d26d93.
[03/19/15 19:41:49] gc-core.c(308): Traversed 577 commits, 507 blocks.
[03/19/15 19:41:49] gc-core.c(440): Scanning unused blocks.
[03/19/15 19:41:49] gc-core.c(472): GC finished. 507 blocks total, about 507 reachable
 blocks, 0 blocks can be removed.

[03/19/15 19:41:50] seafserv-gc.c(124): === Repos deleted by users ===
[03/19/15 19:41:50] seafserv-gc.c(145): === GC is finished ===

[03/19/15 19:41:50] Following repos have blocks to be removed:
repo-id1
repo-id2
repo-id3
```

If you give specific library ids, only those libraries will be checked; otherwise all libraries will
be checked.

Notice that at the end of the output there is a "repos have blocks to be removed" section. It
contains the list of librareis that have garbage blocks. Later when you run GC without --dry-
run option, you can use these libraris ids as input arguments to GC program.

Removing Garbage

To actually remove garbage blocks, run without the --dry-run option:

```
seaf-gc.sh [repo-id1] [repo-id2] ...
```

If libraries ids are specified, only those libraries will be checked for garbage.

As described before, there are two types of garbage blocks to be removed. Sometimes just removing the first type (those belong to deleted libraries) of unused blocks is good enough. In this case, the GC program won't bother to check the libraries for outdated historic blocks. The "-r" option implements this feature:

```
seaf-gc.sh -r
```

In Seafile version 4.1.1 and later, libraries deleted by the users are not immediately removed from the system. Instead, they're moved into a "trash" in the system admin page. Before they're cleared from the trash, their blocks won't be garbage collected.

Using Multiple Threads in GC

Since Pro server 5.1.0, you can specify the thread number in GC. By default,

- If storage backend is S3/Swift/Ceph, 10 threads are started to do the GC work.
- If storage backend is file system, only 1 thread is started.

You can specify the thread number in with "-t" option. "-t" option can be used together with all other options. Each thread will do GC on one library. For example, the following command will use 20 threads to GC all libraries:

```
seaf-gc.sh -t 20
```

Since the threads are concurrent, the output of each thread may mix with each others. Library ID is printed in each line of output.

Run GC in older versions (before 4.1.1)

To run GC program

```
./seaf-gc.sh run
```

If you want to do sanity check before actually removing any data, you can use the --dry-run option

```
./seaf-gc.sh dry-run
```

It will show you the total block number vs. the number of blocks to be removed.

To check data integrity after running GC, you can use seaf-fsck

GC cleanup script for Community Version

To use this script you need:

- Setup the seafile-service file at '/etc/init.d/seafile-server'
- Files of seafile setup need to be owner by 'seafile:nogroup' or 'seafile:seafile'
- Run the script with sudo or as root
- Put the script into crontab of a root user

Create the script file (change the location to your liking):

```
touch /opt/haiwen/seafile/cleanupScript.sh
```

Use your favorite text editor and paste the following code:

```bash
#!/bin/bash

#####
# Uncomment the following line if you rather want to run the script manually.
# Display usage if the script is not run as root user
#        if [[ $USER != "root" ]]; then
#                echo "This script must be run as root user!"
#                exit 1
#        fi
#
# echo "Super User detected!!"
# read -p "Press [ENTER] to start the procedure, this will stop the seafile server!!"
#####

# stop the server
echo Stopping the Seafile-Server...
systemctl stop seafile.service

echo Giving the server some time to shut down properly....
sleep 10

# run the cleanup
echo Seafile cleanup started...
sudo -u seafile $pathtoseafile/seafile-server-latest/seaf-gc.sh -r

echo Giving the server some time....
sleep 3

# start the server again
echo Starting the Seafile-Server...
systemctl start seafile.service

echo Seafile cleanup done!
```

Make sure that the script has been given execution rights, to do that run this command.

```
sudo chmod +x /path/to/yourscript.sh
```

Then open crontab with the root user

```
crontab -e
```

Add the following line (change the location of your script accordingly!)

```
0 2 * * Sun /opt/haiwen/seafile/cleanupScript.sh
```

The script wil then run every Sunday at 2:00 AM.

Clean Database

Seahub

Session

Since version 5.0, we offered command to clear expired session records in Seahub database.

```
cd <install-path>/seafile-server-latest
./seahub.sh clearsessions
```

Activity

To clean the activity records, login in to MySQL/MariaDB and use the following command:

```
use seahub_db;
DELETE FROM Event WHERE to_days(now()) - to_days(timestamp) > 90;
```

The corresponding items in UserEvent will deleted automatically by MariaDB when the foreign keys in Event table are deleted.

Login

To clean the login records, login in to MySQL/MariaDB and use the following command:

```
use seahub_db;
DELETE FROM sysadmin_extra_userloginlog WHERE to_days(now()) - to_days(login_date) > 9
0;
```

File Access

To clean the file access records, login in to MySQL/MariaDB and use the following command:

```
use seahub_db;
DELETE FROM FileAudit WHERE to_days(now()) - to_days(timestamp) > 90;
```

File Update

To clean the file update records, login in to MySQL/MariaDB and use the following command:

```
use seahub_db;
DELETE FROM FileUpdate WHERE to_days(now()) - to_days(timestamp) > 90;
```

Permisson

To clean the permisson records, login in to MySQL/MariaDB and use the following command:

```
use seahub_db;
DELETE FROM PermAudit WHERE to_days(now()) - to_days(timestamp) > 90;
```

WebDAV and FUSE extensions

Seafile WebDAV and FUSE extensions make it easy for Seafile to work with third party applications. For example, you can use Documents App in iOS to access files in Seafile via WebDAV interface.

WebDAV extension

Seafile WebDAV Server(SeafDAV) is added in seafile server 2.1.0.

In the wiki below, we assume your seafile installation folder is `/data/haiwen` .

SeafDAV Configuration

The configuration file is `/data/haiwen/conf/seafdav.conf` . If it is not created already, you can just create the file.

```
[WEBDAV]

# Default is false. Change it to true to enable SeafDAV server.
enabled = true

port = 8080

# Change the value of fastcgi to true if fastcgi is to be used
fastcgi = false

# If you deploy seafdav behind nginx/apache, you need to modify "share_name".
share_name = /
```

Every time the configuration is modified, you need to restart seafile server to make it take effect.

```
./seafile.sh restart
```

Sample Configuration 1: No nginx/apache

Your WebDAV client would visit the Seafile WebDAV server at `http://example.com:8080`

```
[WEBDAV]
enabled = true
port = 8080
fastcgi = false
share_name = /
```

Sample Configuration 2: With Nginx

Your WebDAV client would visit the Seafile WebDAV server at `http://example.com/seafdav`

```
[WEBDAV]
enabled = true
port = 8080
fastcgi = true
share_name = /seafdav
```

In the above config, the value of '"share_name"' is changed to '"/seafdav"', which is the address suffix you assign to seafdav server.

Nginx without HTTPS

The corresponding Nginx configuration is (without https):

```
location /seafdav {
    fastcgi_pass     127.0.0.1:8080;
    fastcgi_param    SCRIPT_FILENAME     $document_root$fastcgi_script_name;
    fastcgi_param    PATH_INFO           $fastcgi_script_name;

    fastcgi_param    SERVER_PROTOCOL     $server_protocol;
    fastcgi_param    QUERY_STRING        $query_string;
    fastcgi_param    REQUEST_METHOD      $request_method;
    fastcgi_param    CONTENT_TYPE        $content_type;
    fastcgi_param    CONTENT_LENGTH      $content_length;
    fastcgi_param    SERVER_ADDR         $server_addr;
    fastcgi_param    SERVER_PORT         $server_port;
    fastcgi_param    SERVER_NAME         $server_name;

    client_max_body_size 0;
    proxy_connect_timeout  36000s;
    proxy_read_timeout  36000s;
    proxy_send_timeout  36000s;
    send_timeout  36000s;

    # This option is only available for Nginx >= 1.8.0. See more details below.
    proxy_request_buffering off;

    access_log      /var/log/nginx/seafdav.access.log;
    error_log       /var/log/nginx/seafdav.error.log;
}
```

Nginx with HTTPS

Nginx conf with https:

```
    location /seafdav {
        fastcgi_pass     127.0.0.1:8080;
        fastcgi_param    SCRIPT_FILENAME     $document_root$fastcgi_script_name;
        fastcgi_param    PATH_INFO           $fastcgi_script_name;

        fastcgi_param    SERVER_PROTOCOL     $server_protocol;
        fastcgi_param    QUERY_STRING        $query_string;
        fastcgi_param    REQUEST_METHOD      $request_method;
        fastcgi_param    CONTENT_TYPE        $content_type;
        fastcgi_param    CONTENT_LENGTH      $content_length;
        fastcgi_param    SERVER_ADDR         $server_addr;
        fastcgi_param    SERVER_PORT         $server_port;
        fastcgi_param    SERVER_NAME         $server_name;
        fastcgi_param    HTTPS               on;
        fastcgi_param    HTTP_SCHEME         https;

        client_max_body_size 0;
        proxy_connect_timeout  36000s;
        proxy_read_timeout   36000s;
        proxy_send_timeout   36000s;
        send_timeout  36000s;

        # This option is only available for Nginx >= 1.8.0. See more details below.
        proxy_request_buffering off;

        access_log      /var/log/nginx/seafdav.access.log;
        error_log       /var/log/nginx/seafdav.error.log;
    }
```

By default Nginx will buffer large request body in temp file. After the body is completely received, Nginx will send the body to the upstream server (seafdav in our case). But it seems when file size is very large, the buffering mechanism dosen't work well. It may stop proxying the body in the middle. So if you want to support file upload larger for 4GB, we suggest you install Nginx version >= 1.8.0 and add `proxy_request_buffering off` to Nginx configuration.

Sample Configuration 3: With Apache

The following configuratioin assumes you use Apache 2.4 or later.

Your WebDAV client would visit the Seafile WebDAV server at `http://example.com/seafdav`

```
[WEBDAV]
enabled = true
port = 8080
fastcgi = false
share_name = /seafdav
```

In the above config, the value of '"share_name"' is changed to '"/seafdav"', which is the address suffix you assign to seafdav server. **Note that we do not use fastcgi for Apache.**

Modify Apache config file (site-enabled/000-default):

Apache without HTTPS

Based on your apache configuration when you deploy Seafile with Apache, add seafdav related config:

```
<VirtualHost *:80>

    ServerName www.myseafile.com
    # Use "DocumentRoot /var/www/html" for Centos/Fedora
    # Use "DocumentRoot /var/www" for Ubuntu/Debian
    DocumentRoot /var/www
    Alias /media  /home/user/haiwen/seafile-server-latest/seahub/media

    RewriteEngine On

    <Location /media>
        Require all granted
    </Location>

    #
    # seafile fileserver
    #
    ProxyPass /seafhttp http://127.0.0.1:8082
    ProxyPassReverse /seafhttp http://127.0.0.1:8082
    RewriteRule ^/seafhttp - [QSA,L]

    #
    # WebDAV
    # We use http proxy, since SeafDAV is incompatible with FCGI proxy in Apache 2.4.
    #
    ProxyPass /seafdav http://127.0.0.1:8080/seafdav
    ProxyPassReverse /seafdav http://127.0.0.1:8080/seafdav

    #
    # seahub
    #
    SetEnvIf Request_URI . proxy-fcgi-pathinfo=unescape
    SetEnvIf Authorization "(.*)" HTTP_AUTHORIZATION=$1
    ProxyPass / fcgi://127.0.0.1:8000/

</virtualhost>
```

Apache with HTTPS

Based on your apache configuration when you Enable Https on Seafile web with Apache, add seafdav related config:

```
<VirtualHost *:443>

  ServerName www.myseafile.com
  DocumentRoot /var/www

  SSLEngine On
  SSLCertificateFile /path/to/cacert.pem
  SSLCertificateKeyFile /path/to/privkey.pem

  Alias /media  /home/user/haiwen/seafile-server-latest/seahub/media

  <Location /media>
    ProxyPass !
    Require all granted
  </Location>

  RewriteEngine On

  #
  # seafile fileserver
  #
  ProxyPass /seafhttp http://127.0.0.1:8082
  ProxyPassReverse /seafhttp http://127.0.0.1:8082
  RewriteRule ^/seafhttp - [QSA,L]

  #
  # WebDAV
  # We use http proxy, since SeafDAV is incompatible with FCGI proxy in Apache 2.4.
  #
  ProxyPass /seafdav http://127.0.0.1:8080/seafdav
  ProxyPassReverse /seafdav http://127.0.0.1:8080/seafdav

  #
  # seahub
  #
  SetEnvIf Request_URI . proxy-fcgi-pathinfo=unescape
  SetEnvIf Authorization "(.*)" HTTP_AUTHORIZATION=$1
  ProxyPass / fcgi://127.0.0.1:8000/

</virtualhost>
```

Notes on Clients

Please first note that, there are some known performance limitation when you map a Seafile webdav server as a local file system (or network drive).

- Uploading large number of files at once is usually much slower than the syncing client. That's because each file needs to be committed separately.
- The access to the webdav server may be slow sometimes. That's because the local file system driver sends a lot of unnecessary requests to get the files' attributes.

So WebDAV is more suitable for infrequent file access. If you want better performance, please use the sync client instead.

Windows

The client recommendation for WebDAV depends on your Windows version:

- For Windows XP: Only non-encryped HTTP connection is supported by the Windows Explorer. So for security, the only viable option is to use third-party clients, such as Cyberduck or Bitkinex.
- For Vista and later versions: Windows Explorer supports HTTPS connection. But it requires a valid certificate on the server. It's generally recommended to use Windows Explorer to map a webdav server as network dirve. If you use a self-signed certificate, you have to add the certificate's CA into Windows' system CA store.

Linux

On Linux you have more choices. You can use file manager such as Nautilus to connect to webdav server. Or you can use davfs2 from the command line.

To use davfs2

```
sudo apt-get install davfs2
sudo mount -t davfs -o uid=<username> https://example.com/seafdav /media/seafdav/
```

The -o option sets the owner of the mounted directory to so that it's writable for non-root users.

It's recommended to disable LOCK operation for davfs2. You have to edit /etc/davfs2/davfs2.conf

```
use_locks       0
```

Mac OS X

Finder's support for WebDAV is also not very stable and slow. So it is recommended to use a webdav client software such as Cyberduck.

Frequently Asked Questions

Clients can't connect to seafdav server

By default, seafdav is disabled. Check whether you have `enabled = true` in `seafdav.conf`. If not, modify it and restart seafile server.

The client gets "Error: 404 Not Found"

If you deploy SeafDAV behind Nginx/Apache, make sure to change the value of `share_name` as the sample configuration above. Restart your seafile server and try again.

Windows Explorer reports "file size exceeds the limit allowed and cannot be saved"

This happens when you map webdav as a network drive, and tries to copy a file larger than about 50MB from the network drive to a local folder.

This is because Windows Explorer has a limit of the file size downloaded from webdav server. To make this size large, change the registry entry on the client machine. There is a registry key named `FileSizeLimitInBytes` under `HKEY_LOCAL_MACHINE -> SYSTEM -> CurrentControlSet -> Services -> WebClient -> Parameters`.

FUSE extension

Files in the seafile system are split to blocks, which means what are stored on your seafile server are not complete files, but blocks. This design faciliates effective data deduplication.

However, administrators sometimes want to access the files directly on the server. You can use seaf-fuse to do this.

`Seaf-fuse` is an implementation of the FUSE virtual filesystem. In a word, it mounts all the seafile files to a folder (which is called the "'mount point'"), so that you can access all the files managed by seafile server, just as you access a normal folder on your server.

Note:

- Encrypted folders can't be accessed by seaf-fuse.
- Currently the implementation is "'read-only'", which means you can't modify the files through the mounted folder.
- One debian/centos systems, you need to be in the "fuse" group to have the permission to mount a FUSE folder.

How to start seaf-fuse

Assume we want to mount to `/data/seafile-fuse`.

Create the folder as the mount point

```
mkdir -p /data/seafile-fuse
```

Start seaf-fuse with the script

Note: Before start seaf-fuse, you should have started seafile server with `./seafile.sh start`.

```
./seaf-fuse.sh start /data/seafile-fuse
```

Since Community server version 4.2.1 and Pro server 4.2.0, the script supports standard mount options for FUSE. For example, you can specify ownership for the mounted folder:

```
./seaf-fuse.sh start -o uid=<uid> /data/seafile-fuse
```

You can find the complete list of supported options in `man fuse`.

Special notes for used with Ceph

If you use Ceph (via librados) as storage backend, you need to add the `-f` option to seaf-fuse.sh, to ask the fuse program not to daemonize. Otherwise the fuse program will have strange "frozen" behaviors when accessing files.

```
./seaf-fuse.sh start -f /data/seafile-fuse
```

Stop seaf-fuse

```
./seaf-fuse.sh stop
```

Contents of the mounted folder

The top level folder

Now you can list the content of `/data/seafile-fuse`.

```
$ ls -lhp /data/seafile-fuse

drwxr-xr-x 2 root root 4.0K Jan  1  2015 abc@abc.com/
drwxr-xr-x 2 root root 4.0K Jan  4  2015 foo@foo.com/
drwxr-xr-x 2 root root 4.0K Jan  1  2015 plus@plus.com/
drwxr-xr-x 2 root root 4.0K Jan  1  2015 sharp@sharp.com/
drwxr-xr-x 2 root root 4.0K Jan  3  2015 test@test.com/
```

- The top level folder contains many subfolders, each of which corresponds to a user

The folder for each user

```
$ ls -lhp /data/seafile-fuse/abc@abc.com

drwxr-xr-x 2 root root  924 Jan  1  1970 5403ac56-5552-4e31-a4f1-1de4eb889a5f_Photos/
drwxr-xr-x 2 root root 1.6K Jan  1  1970 a09ab9fc-7bd0-49f1-929d-6abeb8491397_My Notes
/
```

From the above list you can see, under the folder of a user there are subfolders, each of which represents a library of that user, and has a name of this format: "'{library_id}-{library-name}'".

The folder for a library

```
$ ls -lhp /data/seafile-fuse/abc@abc.com/5403ac56-5552-4e31-a4f1-1de4eb889a5f_Photos/

-rw-r--r-- 1 root root 501K Jan  1  2015 image.png
-rw-r--r-- 1 root root 501K Jan  1  2015 sample.jpng
```

If you get a "Permission denied" error

If you get an error message saying "Permission denied" when running `./seaf-fuse.sh start`, most likely you are not in the "fuse group". You should:

- Add yourself to the fuse group

  ```
  sudo usermod -a -G fuse <your-user-name>
  ```

- Logout your shell and login again

- Now try `./seaf-fuse.sh start <path>` again.

Security and auditing

Security features

- [Security features](#)

Access log and auditing

- [Access log and auditing](#)

Config fail2ban

- [Config fail2ban](#)

Security Questions

How is the connection between client and server encrypted?

Seafile uses HTTP(S) to syncing files between client and server (Since version 4.1.0).

Encrypted Library

Seafile provides a feature called encrypted library to protect your privacy. The file encryption/decryption is performed on client-side when using the desktop client for file synchronization. The password of an encrypted library is not stored on the server. **Even the system admin of the server can't view the file contents - they can however view the metadata which are currently not encrypted.** The metadata includes: the complete list of directory and file names, every files size, the history of editors, when, and what byte ranges were altered.

CAUTION: The client side encryption does currently NOT work while using the web browser and the cloud file explorer of the desktop client. When you are browsing encrypted libraries via the web browser or the cloud file explorer, you need to input the password and the server is going to use the password to decrypt the "file key" for the library (see description below) and cache the password in memory for one hour. The plain text password is never stored or cached on the server.

The client side encryption works on iOS client since version 2.1.6. The Android client support client side encryption since version 2.1.0.

How does an encrypted library work?

When you create an encrypted library, you'll need to provide a password for it. All the data in that library will be encrypted with the password before uploading it to the server (see limitations above).

The encryption procedure is:

1. Generate a 32-byte long cryptographically strong random number. This will be used as the file encryption key ("file key").
2. Encrypt the file key with the user provided password. We first use PBKDF2 algorithm (1000 iterations of SHA256) to derive a key/iv pair from the password, then use AES 256/CBC to encrypt the file key. The result is called the "encrypted file key". This

encrypted file key will be sent to and stored on the server. When you need to access the data, you can decrypt the file key from the encrypted file key.

3. All file data is encrypted by the file key with AES 256/CBC. We use PBKDF2 algorithm (1000 iterations of SHA256) to derive key/iv pair from the file key. After encryption, the data is uploaded to the server.

The above encryption procedure can be executed on the desktop and the mobile client. The Seahub browser client uses a different encryption procedure that happens at the server. Because of this your password will be transferred to the server.

When you sync an encrypted library to the desktop, the client needs to verify your password. When you create the library, a "magic token" is derived from the password and library id. This token is stored with the library on the server side. The client use this token to check whether your password is correct before you sync the library. The magic token is generated by PBKDF2 algorithm with 1000 iterations of SHA256 hash.

For maximum security, the plain-text password won't be saved on the client side, too. The client only saves the key/iv pair derived from the "file key", which is used to decrypt the data. So if you forget the password, you won't be able to recover it or access your data on the server.

Why fileserver delivers every content to everybody knowing the content URL of an unshared private file?

When a file download link is clicked, a random URL is generated for user to access the file from fileserver. This url can only be access once. After that, all access will be denied to the url. So even if someone else happens to know about the url, he can't access it anymore.

How does Seafile store user login password?

User login passwords are stored in hash form only. Note that user login password is different from the passwords used in encrypted libraries. In the database, its format is

```
PBKDF2SHA256$iterations$salt$hash
```

The record is divided into 4 parts by the $ sign.

- The first part is the used hash algorithm. Currently we use PBKDF2 with SHA256. It can be changed to an even stronger algorithm if needed.
- The second part is the number of iterations of the hash algorithm
- The third part is the random salt used to generate the hash

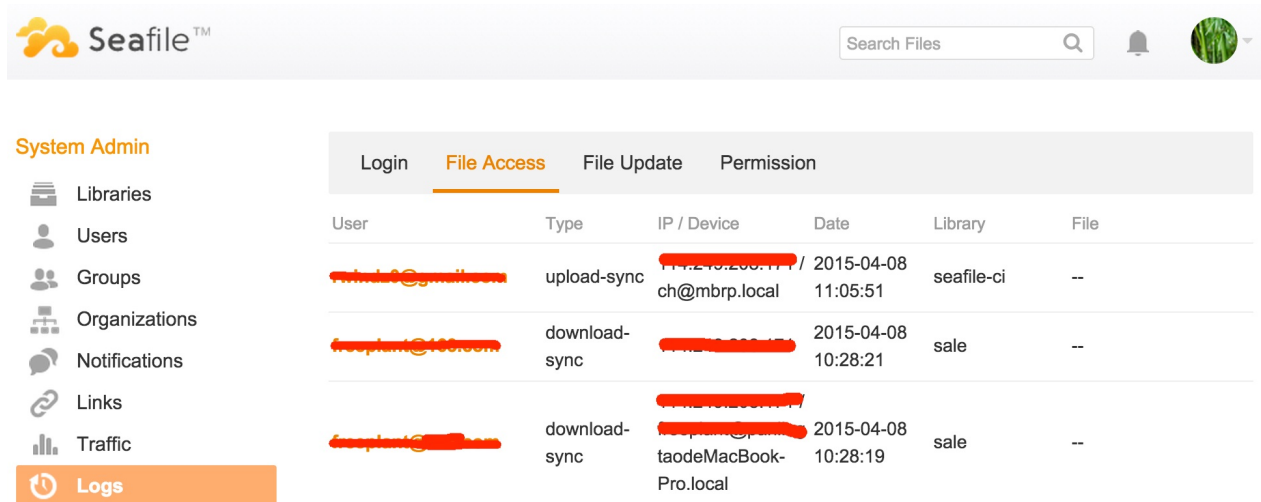- The fourth part is the final hash generated from the password

To calculate the hash:

- First, generate a 32-byte long cryptographically strong random number, use it as the salt.
- Calculate the hash with `PBKDF2(password, salt, iterations)`. The number of iterations is currently 10000.

Access log and auditing

In the Pro Edition, Seafile offers four audit logs in system admin panel:

- Login log
- File access log (including access to shared files)
- File update log
- Permission change log

The logging feature is turned off by default before version 6.0. Add the following option to `seafevents.conf` to turn it on:

```
[Audit]
## Audit log is disabled default.
## Leads to additional SQL tables being filled up, make sure your SQL server is able to handle it.
enabled = true
```

See config options for pro edition for more information.

The audit log data is being saved in `seahub-db` .

seafile-authentication-fail2ban

What is fail2ban ?

Fail2ban is an intrusion prevention software framework which protects computer servers from brute-force attacks. Written in the Python programming language, it is able to run on POSIX systems that have an interface to a packet-control system or firewall installed locally, for example, iptables or TCP Wrapper.

(Definition from wikipedia - https://en.wikipedia.org/wiki/Fail2ban)

Why do I need to install this fail2ban's filter ?

To protect your seafile website against brute force attemps. Each time a user/computer tries to connect and fails 3 times, a new line will be write in your seafile logs (`seahub.log`).

Fail2ban will check this log file and will ban all failed authentications with a new rule in your firewall.

Installation

Copy and edit jail.local file

WARNING: this file may override some parameters from your `jail.conf` file

Edit `jail.local` with :

- ports used by your seafile website (e.g. `http,https`) ;
- logpath (e.g. `/home/yourusername/logs/seahub.log`) ;
- maxretry (default to 3 is equivalent to 9 real attemps in seafile, because one line is written every 3 failed authentications into seafile logs).

Create the file `jail.local` in `/etc/fail2ban` with the following content:

```
# All standard jails are in the file configuration located
# /etc/fail2ban/jail.conf

# Warning you may override any other parameter (e.g. banaction,
# action, port, logpath, etc) in that section within jail.local

# Change logpath with your file log used by seafile (e.g. seahub.log)
# Also you can change the max retry var (3 attemps = 1 line written in the
# seafile log)
# So with this maxrety to 1, the user can try 3 times before his IP is banned

[seafile]

enabled  = true
port     = http,https
filter   = seafile-auth
logpath  = /home/yourusername/logs/seahub.log
maxretry = 3
```

Create the fail2ban filter file `seafile-auth.conf` in `/etc/fail2ban/filter.d` with the following content:

```
# Fail2Ban filter for seafile
#

[INCLUDES]

# Read common prefixes. If any customizations available -- read them from
# common.local
before = common.conf

[Definition]

_daemon = seaf-server

failregex = Login attempt limit reached.*, ip: <HOST>

ignoreregex =

# DEV Notes:
#
# pattern :    2015-10-20 15:20:32,402 [WARNING] seahub.auth.views:155 login Login at
tempt limit reached, username: <user>, ip: 1.2.3.4, attemps: 3
#        2015-10-20 17:04:32,235 [WARNING] seahub.auth.views:163 login Login attempt l
imit reached, ip: 1.2.3.4, attempts: 3
```

Restart fail2ban

Finally, just restart fail2ban and check your firewall (iptables for me) :

```
sudo fail2ban-client reload
sudo iptables -S
```

Fail2ban will create a new chain for this jail. So you should see these new lines :

```
...
-N fail2ban-seafile
...
-A fail2ban-seafile -j RETURN
```

Tests

To do a simple test (but you have to be an administrator on your seafile server) go to your seafile webserver URL and try 3 authentications with a wrong password.

Actually, when you have done that, you are banned from http and https ports in iptables, thanks to fail2ban.

To check that :

on fail2ban

```
denis@myserver:~$ sudo fail2ban-client status seafile
Status for the jail: seafile
|- filter
|  |- File list:    /home/<youruser>/logs/seahub.log
|  |- Currently failed:    0
|  `- Total failed:    1
`- action
   |- Currently banned:    1
   |  `- IP list:    1.2.3.4
   `- Total banned:    1
```

on iptables :

```
sudo iptables -S

...
-A fail2ban-seafile -s 1.2.3.4/32 -j REJECT --reject-with icmp-port-unreachable
...
```

To unban your IP address, just execute this command :

```
sudo fail2ban-client set seafile unbanip 1.2.3.4
```

FAQ

Very common problem

Seafile/Seahub can't start after upgrade or any other reasons

Please check whether the old version of Seahub is still running.

Please check whether you use the right user to run or upgrade Seafile. Pay special attention to the following files:

- `seafile-directory/seafile-server-6.0.3/runtime/error.log`
- `seafile-directory/seafile-server-6.0.3/runtime/access.log`
- `seafile-directory/logs/*`

You can run the following command to change fix the permission for the whole directory:

```
chown -R userx:groupx seafiledirectory
```

You can also try remove the cache directory of Seahub

```
rm -rf /tmp/seahub_cache
```

Server

- Common problems in setup server
- Libraries, users and groups management
- LDAP
- GC and fsck
- Common problems after upgrade
- Can't start server
- Cluster
- Ceph

Client

- Common problems about desktop syncing client

Setup

Failed to upload/download file online

- Make sure your firewall for seafile fileserver is opened.
- Make sure `SERVICE_URL` in ccnet.conf and `FILE_SERVER_ROOT` in seahub_settings.py are set correctly. Furthermore check that you haven't overwritten them using the settings in the Seahub Admin section.
- Use Chrome/Firefox debug mode to find out which address is being used when clicking download button and whether it is correct.

Does Seafile server support Python 3?

No, You must have Python 2.7 installed on your server.

Seahub/Seafile started correctly, but when visiting the web interface, it shows "Internal Server Error"

It is mostly likely some required Python packages of Seahub is not installed correctly.

You can check the detailed error messages in `/var/log/nginx/seahub.error.log` if you use Nginx.

Website displays "Page unavailable", what can I do?

- You can check the back trace in Seahub log files (`installation folder/logs/seahub_django_request.log`)

- You can also turn on debug mode by adding `DEBUG = True` to `seahub_settings.py` and restarting Seahub with `./seahub.sh restart` , then refresh the page, all the debug infomations will be displayed. Make sure ./seahub.sh was started as: ./seahub.sh start-fastcgi in case you're using fastcgi.

Files with a space in their name do not work using Apache

See http://manual.seafile.com/deploy/deploy_with_apache.html#problems-with-paths-and-files-containing-spaces

How to change seafile-data location after setup?

Modify file `seafile.ini` under ccnet. This file contains the location of seafile-data. Move seafile-data to another place, like `/opt/new/seafile-data` and modify `seafile.ini` accordingly.

Failed to send email, what can I do?

Please check logs/seahub.log.

There are some common mistakes:

1. Check whether there are typos in the config (`seahub_settings.py` , e.g. you could have forgotten to add a single quote `EMAIL_HOST_USER = XXX` , which should be `EMAIL_HOST_USER = 'XXX'` or you could have a space at the end of a config line.
2. Your mail server is not available.

LDAP related issues

Can't connect to LDAP server with ldaps

Description

Seafile server can't communication with my LDAP server. The ccnet.log shows:

```
[08/05/16 09:47:17] ../common/session.c(398): Accepted a local client
[08/05/16 09:47:17] user-mgr.c(335): ldap_initialize failed: Bad parameter to an ldap
routine.
[08/05/16 09:47:17] user-mgr.c(773): Ldap init and bind failed using 'cn=XXX,dc=XXX,dc
=XXX': 'XXXXXXX' on server 'ldaps://10.XX.XX.XX/'.
```

Answer

If you are using pro edition, you can check the LDAP configuration by running a script as described in http://manual.seafile.com/deploy_pro/using_ldap_pro.html (search Testing your LDAP Configuration).

If the script can correctly talk to ldap server, it is most likely caused by incompatible of bundled LDAP libraries. You can follow http://manual.seafile.com/deploy/using_ldap.html (the end of document) to remove the bundled LDAP libraries.

How to restrict Seafile access to certain accounts in AD

Answer

You can use FILTER field in LDAP configuration in `ccnet.conf` . For example, the following filter restricts the access to Seafile to members of a group.

```
FILTER = memberOf=cn=group,cn=users,DC=x
```

AD also supports subgroups. The following filter restricts the access to Seafile to membersand subgroups of a group.

```
FILTER = memberOf:1.2.840.113556.1.4.1941:=cn=group,cn=users,DC=x
```

For more information on the Filter syntax, see http://msdn.microsoft.com/en-us/library/aa746475%28VS.85%29.aspx

Upgrade

After upgrading Web UI is broken because CSS files can't be loaded

Answer

Please remove the cache and try again, `rm -rf /tmp/seahub_cache/*` . If you configured memecached, restart memcached, then restart Seahub.

If the problem is not fixed, check whether seafile-server-latest point to the correct folder. Then check whether `seafile-server-latest/seahub/media/CACHE` is correctly being generated (it should contain the auto-generated CSS file(s)).

Avatar pictures vanished after upgrading the server, what can I do?

Answer

- You need to check whether the "avatars" symbolic link under seahub/media/ is linking to ../../../seahub-data/avatars. If not, you need to correct the link according to the "minor upgrade" section in Upgrading-Seafile-Server.

- If your avatars link is correct, and avatars are still broken, you may need to refresh Seahub cache using `rm -rf /tmp/seahub_cache/*` or by restarting memcached if being used.

GC/FSCK related issues

Seafile GC shows errors, FSCK can't fix them

Answer

GC scans the history. But FSCK only scans the current version. You can ignore the error. It is a minor issue.

Libraries and Groups management

How to migrate libraries and groups from one account to another?

Answer

Since version 4.4.2, system admins can migrate libraries and groups from one account to another existing account using RESTful web api.

Some component of Seafile can't be started

Seahub can't be started after power failure

Please try clean the cache directory `seahub_cache`

Seafevents can't be started

Description

Office files online preview can't work. There is no logs in seafevents.log. From `controller.log` , the seafevent process is being started again and again.

Answer

Please check the permission of `seafevent.pid` and `seafevent.log` . If seafevent can't write to these files, it will fail to start.

You can also try start seafevents manually following:
https://download.seafile.com/f/423d5d6301/

Seahub can't be started

lease check the permission of `seahub.pid` , `seahub_django_request.log` and `seahub.log` . If Seahub can't write to these files, it will fail to start.

Questions about Clustering

Page layout broken because seahub/media/CACHE is created only on first node

Please add

```
COMPRESS_CACHE_BACKEND = 'django.core.cache.backends.locmem.LocMemCache'
```

to `seahub_settings.py` as documented at

http://manual.seafile.com/deploy_pro/deploy_in_a_cluster.html

This is going to tell every node to generate the CSS CACHE in its local folder.

Ceph

Seafile server can't started when using Ceph

Description

Seafile server can't started when using Ceph as storage backend. seafile.log is empty. controller.log shows:

```
[10/20/16 12:39:29] seafile-controller.c(568): pid file /opt/seafile/pids/seaf-server.
pid does not exist
[10/20/16 12:39:29] seafile-controller.c(588): seaf-server need restart...
[10/20/16 12:39:29] seafile-controller.c(198): starting seaf-server ...
```

Answer

This is most likely caused by Ceph library incompatible.

You can install `librados` provided by the Linux distribution, then remove bundled libraries:

```
cd seafile-server-latest/seafile/lib
rm librados.so.2 libstdc++.so.6 libnspr4.so
```

You can also run `seaf-fsck.sh` . It will print detailed message if Ceph library incompatible.

GC error when removing blocks in Ceph

Description

We just did a GC run which came up with errors when deleting blocks. This seems to happen with all blocks/libraries. Below is an example for a single library.

```
Starting seafserv-gc, please wait ...
[08/29/16 09:15:41] gc-core.c(768): Database is MySQL/Postgre, use online GC.
[08/29/16 09:15:41] gc-core.c(792): Using up to 10 threads to run GC.
[08/29/16 09:15:41] gc-core.c(738): GC version 1 repo Documents(135ca71c-da2b-4b07-86e
3-c7a1d46b9b22)
[08/29/16 09:16:04] gc-core.c(510): GC started for repo 135ca71c. Total block number i
s 294.
[08/29/16 09:16:04] gc-core.c(68): GC index size is 1024 Byte for repo 135ca71c.
[08/29/16 09:16:04] gc-core.c(269): Populating index for repo 135ca71c.
[08/29/16 09:16:04] gc-core.c(334): Traversed 33 commits, 402 blocks for repo 135ca71c
.
[08/29/16 09:16:04] gc-core.c(559): Scanning and deleting unused blocks for repo 135ca
71c.
[08/29/16 09:16:04] ../../common/block-backend-ceph.c(463): [block bend] Failed to rem
ove block 79fc986a: No such file
or directory.
[08/29/16 09:16:04] ../../common/block-backend-ceph.c(463): [block bend] Failed to rem
ove block ae2678f8: No such file
or directory.
[08/29/16 09:16:04] ../../common/block-backend-ceph.c(463): [block bend] Failed to rem
ove block 9fe1ca0b: No such file
or directory.
[08/29/16 09:16:04] ../../common/block-backend-ceph.c(463): [block bend] Failed to rem
ove block 4cad277e: No such file
or directory.
[08/29/16 09:16:04] ../../common/block-backend-ceph.c(463): [block bend] Failed to rem
ove block e9c94b16: No such file
or directory.
[08/29/16 09:16:04] gc-core.c(577): GC finished for repo 135ca71c. 294 blocks total, a
bout 402 reachable blocks, 5
blocks are removed.

[08/29/16 09:16:04] gc-core.c(839): === GC is finished ===
seafserv-gc run done
```

Answer

Your "issue" looks similar to the one discussed here: http://lists.ceph.com/pipermail/ceph-users-ceph.com/2015-November/005837.html

That should be related to the behavior of cache tier in Ceph. You could try to use "rados rm" command to remove that object. If it returns the same error (no such file or directory), it should be the same issue. You should try to copy that object out before removing it, in case you still need it later.

Desktop Syncing Client

When downloading a library, the client hangs at "connecting server"

First, you can check the Seafile client log (`~/.ccnet/logs/seafile.log` for Linux, `C:/users/your_name/ccnet/logs/seafile.log` for Windows) to see what's wrong.

Possible reasons:

- Firewall: Ensure the firewall is configured properly. See Firewall Settings for Seafile Server

How to enable more verbose log output for the client

Set environment variable `SEAFILE_DEBUG = all` before running Seafile client. On Linux, you can open a terminal and type:

```
export SEAFILE_DEBUG=all
./seafile-applet
```

Develop Documents

- How to Build Seafile

- How to Setup Develop Envirnoment

- Seafile Code Standard

Seafile Open API

- Seafile Web API
- Seafile Python API
- Seafile PHP API

Seafile Implement Detail

- Seafile Data Model
- Seafile Server Components
- Seafile Sync algorithm

How to Build Seafile

You can build Seafile from our source code package or from the Github repo directly.

Client

- Linux
- Max OS X

Server

- Build Seafile server

Linux

Preparation

The following list is what you need to install on your development machine. **You should install all of them before you build seafile**.

Package names are according to Ubuntu 14.04. For other Linux distros, please find their corresponding names yourself.

- autoconf/automake/libtool
- libevent-dev (2.0 or later)
- libcurl4-openssl-dev (1.0.0 or later)
- libgtk2.0-dev (2.24 or later)
- uuid-dev
- intltool (0.40 or later)
- libsqlite3-dev (3.7 or later)
- valac (only needed if you build from git repo)
- libjansson-dev
- qtchooser
- qtbase5-dev
- libqt5webkit5-dev
- qttools5-dev
- qttools5-dev-tools
- valac
- cmake
- python-simplejson (for seaf-cli)

```
sudo apt-get install autoconf automake libtool libevent-dev libcurl4-openssl-dev libgt
k2.0-dev uuid-dev intltool libsqlite3-dev valac libjansson-dev cmake qtchooser qtbase5
-dev libqt5webkit5-dev qttools5-dev qttools5-dev-tools
```

For a fresh Fedora 20 / 23 installation, the following will install all dependencies via YUM:

```
$ sudo yum install wget gcc libevent-devel openssl-devel gtk2-devel libuuid-devel sqli
te-devel jansson-devel intltool cmake libtool vala gcc-c++ qt5-qtbase-devel qt5-qttool
s-devel qt5-qtwebkit-devel libcurl-devel
```

Building

First you should get the latest source of libsearpc/ccnet/seafile/seafile-client:

Linux

Download the source tarball of the latest tag from

- https://github.com/haiwen/libsearpc/tags (use v3.0-latest)
- https://github.com/haiwen/ccnet/tags
- https://github.com/haiwen/seafile/tags
- https://github.com/haiwen/seafile-client/tags

For example, if the latest released seafile client is 5.0.7, then just use the **v5.0.7** tags of the four projects. You should get four tarballs:

- libsearpc-v3.0-latest.tar.gz
- ccnet-5.0.7.tar.gz
- seafile-5.0.7.tar.gz
- seafile-client-5.0.7.tar.gz

```
export version=5.0.7
alias wget='wget --content-disposition -nc'
wget https://github.com/haiwen/libsearpc/archive/v3.0-latest.tar.gz
wget https://github.com/haiwen/ccnet/archive/v${version}.tar.gz
wget https://github.com/haiwen/seafile/archive/v${version}.tar.gz
wget https://github.com/haiwen/seafile-client/archive/v${version}.tar.gz
```

Now uncompress them:

```
tar xf libsearpc-3.0-latest.tar.gz
tar xf ccnet-${version}.tar.gz
tar xf seafile-${version}.tar.gz
tar xf seafile-client-${version}.tar.gz
```

To build Seafile client, you need first build **libsearpc** and **ccnet**, **seafile**.

set paths

```
export PREFIX=/usr
export PKG_CONFIG_PATH="$PREFIX/lib/pkgconfig:$PKG_CONFIG_PATH"
export PATH="$PREFIX/bin:$PATH"
```

libsearpc

```
cd libsearpc-3.0-latest
./autogen.sh
./configure --prefix=$PREFIX
make
sudo make install
cd ..
```

ccnet

```
cd ccnet-${version}
./autogen.sh
./configure --prefix=$PREFIX
make
sudo make install
cd ..
```

seafile

```
cd seafile-${version}/
./autogen.sh
./configure --prefix=$PREFIX --disable-fuse
make
sudo make install
cd ..
```

seafile-client

```
cd seafile-client-${version}
cmake -DCMAKE_BUILD_TYPE=Release -DCMAKE_INSTALL_PREFIX=$PREFIX .
make
sudo make install
cd ..
```

custom prefix

when installing to a custom `$PREFIX` , i.e. `/opt` , you may need a script to set the path variables correctly

```
cat >$PREFIX/bin/seafile-applet.sh <<END
#!/bin/bash
export LD_LIBRARY_PATH="$PREFIX/lib:$LD_LIBRARY_PATH"
export PATH="$PREFIX/bin:$PATH"
exec seafile-applet $@
END
cat >$PREFIX/bin/seaf-cli.sh <<END
export LD_LIBRARY_PATH="$PREFIX/lib:$LD_LIBRARY_PATH"
export PATH="$PREFIX/bin:$PATH"
export PYTHONPATH=$PREFIX/lib/python2.7/site-packages
exec seaf-cli $@
END
chmod +x $PREFIX/bin/seafile-applet.sh $PREFIX/bin/seaf-cli.sh
```

you can now start the client with `$PREFIX/bin/seafile-applet.sh` .

FreeBSD

Preparation

support for FreeBSD is still under construction.

The following list is what you need to install on your development machine. **You should install all of them before you build seafile**.

Package names are according to FreeBSD Ports. You might install your ports manually or via `pkgng` .

- devel/autoconf
- devel/automake
- textproc/intltool
- textproc/gsed
- devel/libtool
- devel/libevent2
- ftp/curl
- devel/glib20
- misc/ossp-uuid
- databases/sqlite3
- devel/jansson
- lang/vala
- devel/cmake
- archivers/libarchive
- devel/py-simplejson (removed in furture release)

GUI

- devel/qt4

```
#portmaster devel/autoconf devel/automake textproc/intltool textproc/gsed \
devel/libtool devel/libevent2 ftp/curl devel/glib20 misc/ossp-uuid databases/sqlite3 \
devel/jansson lang/vala devel/cmake devel/py-simplejson archivers/libarchive
```

For a fresh PkgNG users,

```
#pkg install autoconf automake intltool gsed libtool libevent2 curl \
  glib20 ossp-uuid sqlite3 jansson vala cmake py-simplejson libarchive
```

Building

First you should get the latest source of libsearpc/ccnet/seafile/seafile-client:

Download the source tarball of the latest tag from

- https://github.com/haiwen/libsearpc/tags (use v3.0-latest)
- https://github.com/haiwen/ccnet/tags
- https://github.com/haiwen/seafile/tags
- https://github.com/haiwen/seafile-client/tags

For example, if the latest released seafile client is 3.1.0, then just use the **v3.1.0** tags of the four projects. You should get four tarballs:

- libsearpc-v3.0-latest.tar.gz
- ccnet-3.1.0.tar.gz
- seafile-3.1.0.tar.gz
- seafile-client-3.1.0.tar.gz

```
export version=3.1.0
alias wget='wget --content-disposition -nc'
wget https://github.com/haiwen/libsearpc/archive/v3.0-latest.tar.gz
wget https://github.com/haiwen/ccnet/archive/v${version}.tar.gz
wget https://github.com/haiwen/seafile/archive/v${version}.tar.gz
wget https://github.com/haiwen/seafile-client/archive/v${version}.tar.gz
```

Now uncompress them:

```
tar xf libsearpc-v3.0-latest.tar.gz
tar xf ccnet-${version}.tar.gz
tar xf seafile-${version}.tar.gz
tar xf seafile-client-${version}.tar.gz
```

To build Seafile client, you need first build **libsearpc** and **ccnet**, **seafile**.

set paths

```
ln -sfh ../libdata/pkgconfig /usr/local/lib/pkgconfig
```

libsearpc

```
cd libsearpc-${version}
./autogen.sh
./configure --prefix=$PREFIX
make
sudo make install
```

ccnet

```
export CFLAGS="-I/usr/local/include/ossp/uuid -I/usr/local/include/event2"
export LDFLAGS="-L/usr/local/lib -L/usr/local/lib/event2"
cd ccnet-${version}
./autogen.sh
./configure --prefix=$PREFIX
make
sudo make install
```

seafile

```
cd seafile-${version}/
./autogen.sh
./configure --prefix=$PREFIX
make
sudo make install
```

seafile-client

```
cd seafile-client-${version}
cmake -DCMAKE_BUILD_TYPE=Release -DCMAKE_INSTALL_PREFIX=$PREFIX .
make
sudo make install
```

custom prefix

when installing to a custom `$PREFIX`, i.e. `/opt`, you may need a script to set the path variables correctly

```
cat >$PREFIX/bin/seafile-applet.sh <<END
#!/bin/bash
exec seafile-applet $@
END
cat >$PREFIX/bin/seaf-cli.sh <<END
export PYTHONPATH=/usr/local/lib/python2.7/site-packages
exec seaf-cli $@
END
chmod +x $PREFIX/bin/seafile-applet.sh $PREFIX/bin/seaf-cli.sh
```

you can now start the client with `$PREFIX/bin/seafile-applet.sh`.

Windows

Mac OS X

Install QT 5.6.2:

- Download it from https://download.qt.io/archive/qt/5.6/5.6.2/qt-opensource-mac-x64-clang-5.6.2.dmg
- Double click the downloaded dmg file to start the installer, and install it to its default location.

Install Macports

Setup macports environment

1. Install xcode

    - Download Xcode from website or App Store
2. Install macports

    - Quick start https://www.macports.org/install.php

> visit https://www.macports.org/ for more

1. Install following libraries and tools using `port`

    ```
    sudo port install autoconf automake pkgconfig libtool glib2 \
    libevent vala openssl git jansson cmake
    ```

2. Install python

    ```
    sudo port install python27
    sudo port select --set python python27

    sudo port install py27-pip
    sudo port select --set pip pip27
    ```

3. Set pkg config environment

```
export PKG_CONFIG_PATH=/opt/local/lib/pkgconfig:/usr/local/lib/pkgconfig
export LIBTOOL=glibtool
export LIBTOOLIZE=glibtoolize
export CPPFLAGS="-I/opt/local/include"
export LDFLAGS="-L/opt/local/lib -L/usr/local/lib -Wl,-headerpad_max_install_name
s"

QT_BASE=$HOME/Qt5.6.2/5.6/clang_64
export PATH=$QT_BASE/bin:$PATH
export PKG_CONFIG_PATH=$QT_BASE/lib/pkgconfig:$PKG_CONFIG_PATH
```

Compiling libsearpc

Download libsearpc, then:

```
./autogen.sh
./configure
make
sudo make install
```

Compiling ccnet

Download ccnet, then:

```
./autogen.sh
./configure
make
sudo make install
```

Compiling seafile

1. Download seafile
2. Compile

```
./autogen.sh
./configure --disable-fuse
make
sudo make install
```

Compiling seafile-client and packaging it

1. execute the building script:

```
./scripts/build.py
```

2. Go to Release directory and see if `seafile-applet.app` can run correctly.

Problem you may encounter

1. If `install_name_tool` reports "malformed object" "unknown load command", It may be the version of xcode command line tools incompatible with `install_name_tool` .
2. If xcode can't find glib, Corrects xcode's "build settings/search paths/header search".

Server

Preparation

The following list is all the libraries you need to install on your machine. **You should install all of them before you build seafile**.

Package names are according to Ubuntu 12.04. For other Linux distros, please find their corresponding names yourself.

- libevent-dev (2.0 or later)
- libcurl4-openssl-dev (1.0.0 or later)
- libglib2.0-dev (2.28 or later)
- uuid-dev
- intltool (0.40 or later)
- libsqlite3-dev (3.8 or later)
- libmysqlclient-dev (5.5 or later)
- libarchive-dev
- libtool
- libjansson-dev
- valac
- libfuse-dev

Also, python 2.7 is required since seafile server 5.1.0.

The following libraries need to be compiled from source.

Notes about MySQL client library

You can also use MariaDB's LGPL Connector/C library. Download the latest stable version of the library on https://downloads.mariadb.org/connector-c/ then compile and install the library.

```
cmake .
make
sudo make install
```

By default the library will be installed under `/usr/local/lib/mariadb` . Add this path to your `LD_LIBRARY_PATH` environment variable so the loader can find this library.

```
export LD_LIBRARY_PATH=$LD_LIBRARY_PATH:/usr/local/lib/mariadb
```

libevhtp

- Download libevhtp.
- Build libevhtp by:

```
cmake -DEVHTP_DISABLE_SSL=ON -DEVHTP_BUILD_SHARED=OFF .
make
sudo make install
```

Seahub dependencies

Seahub is the web front end of Seafile. It's written in the django framework. Seahub requires Python 2.6(or 2.7) installed on your server, and it needs the following python libraries:

- Django 1.8
- pytz
- django-statici18n
- djangorestframework
- django_compressor
- django-post_office
- django-constance (install it by `pip install https://github.com/haiwen/django-constance/archive/bde7f7c.zip`)
- gunicorn
- flup
- chardet
- python-dateutil
- six
- openpyxl

Before continue, make sure you have all the above libraries available in your system.

Prepare the directory layout

In the following sections, you'll be guided to build and setup the seafile server step by step. Seafile server is consisted of several components. In order for them to function correctly, you must:

- Follow our instructions step by step
- Make sure your directory layout is exactly the same with the guide in each step.

First create the top level directory. In the following sections, we'll use "/data/haiwen" as the top level directory.

```
mkdir /data/haiwen/
cd /data/haiwen/
mkdir seafile-server
cd seafile-server
```

The currently layout is:

```
haiwen/
└── seafile-server
```

Get the source

First you should get the latest source of libsearpc/ccnet-server/seafile-server/seahub

Download the source tarball of the latest tag from

- https://github.com/haiwen/libsearpc/tags
- https://github.com/haiwen/ccnet-server/tags
- https://github.com/haiwen/seafile-server/tags
- https://github.com/haiwen/seahub/tags

For example, if the latest released seafile server is 6.0.1, then just use the **v6.0.1-server** tags of the projects (except for libsearpc, which uses the **v3.0-latest** tag). You should get four tarballs:

- libsearpc-3.0-latest.tar.gz
- ccnet-server-6.0.1-server.tar.gz
- seafile-server-6.0.1-server.tar.gz
- seahub-6.0.1-server.tar.gz

Create a folder `haiwen/src` , and uncompress libsearpc/ccnet/seafile source to it.

```
cd haiwen/seafile-server
mkdir src
cd src
tar xf /path/to/libsearpc-3.0-latest.tar.gz
tar xf /path/to/ccnet-server-6.0.1-server.tar.gz
tar xf /path/to/seafile-server-6.0.1-server.tar.gz
```

And uncompress seahub tarball to `haiwen/seafile-server` :

```
cd haiwen/seafile-server
tar xf /path/to/seahub-6.0.1-server.tar.gz
mv seahub-6.0.1-server seahub
```

So far, The current directory layout is:

```
haiwen/
└── seafile-server
    └── seahub
    └── src
        ├── libsearpc-6.0.1-server
        ├── ccnet-server-6.0.1-server
        ├── seafile-server-6.0.1-server
        ├── ... (other files)
```

Building

To build seafile server, you need first build **libsearpc** and **ccnet-server**.

libsearpc

```
cd libsearpc-${version}
./autogen.sh
./configure
make
make install
```

ccnet-server

```
cd ccnet-server-${version}
./autogen.sh
./configure # `export PKG_CONFIG_PATH=/usr/local/lib/pkgconfig` if libsearpc is not fo
und
make
make install
```

By default, `configure` tries to find MySQL and Postgresql client libraries in the system. If you do not want to support MySQL or Postgresql, use the following configure options:

```
./configure --without-mysql --without-postgresql
```

If you want to use MariaDB Connector/C library, use the following configure option:

```
./configure --with-mysql=/usr/local/bin/mariadb_config
```

seafile-server

```
cd seafile-${version}
./autogen.sh
./configure
make
make install
```

You can use the same options as ccnet-server to configure MySQL and Postgresql client libraries.

Note: You need to run `sudo ldconfig` to refresh the system libraries cache after you compiles all the components.

Deploy Seafile Server

Components of the Seafile Server

The seafile server consists of the following components:

Process Name	Functionality
ccnet-server	underlying networking
seaf-server	data management
Seahub	website front-end of seafile server
fileserver	handles raw file upload/download for Seahub
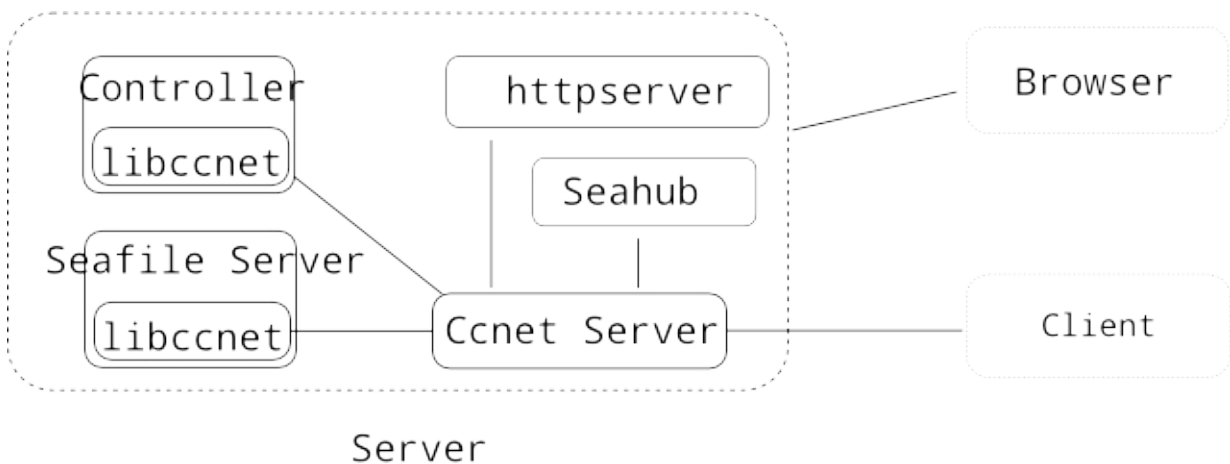
- **ccnet** stores its configuration and metadata is a directory named `ccnet`.
- **seaf-server** store its configuration and data in a directory, normally named `seafile-data`.
- **seahub** is written in Django. If you have any experience with Django, you should know the `syncdb` command must be run to create all the database tables.
- An **admin account** has to be created, so that you, the admin, can login with this account to manage the server.

These are the essential steps to create the configuration:

- ensure seafile is already installed and all the python libraries seahub needs are installed.
- create the ccnet configuration with the **ccnet-init** program
- create the seafile configuration with **seaf-server-init** program
- run Django **syncdb** command for seahub

- create an admin account for the seafile server

To create the configurations, you can either:

- use the seafile-admin script(see below)
- [[create server configuration by hand]]

Create Configurations with the seafile-admin script

`seafile-admin` should have been installed to system path after you have built and installed Seafile from source.

```
usage: seafile-admin [-h] {setup,start,stop,reset-admin} ...

optional arguments:
  -h, --help             show this help message and exit

subcommands:

  {setup,start,stop,reset-admin}
    setup               setup the seafile server
    start               start the seafile server
    stop                stop the seafile server
    reset-admin         reset seafile admin account
```
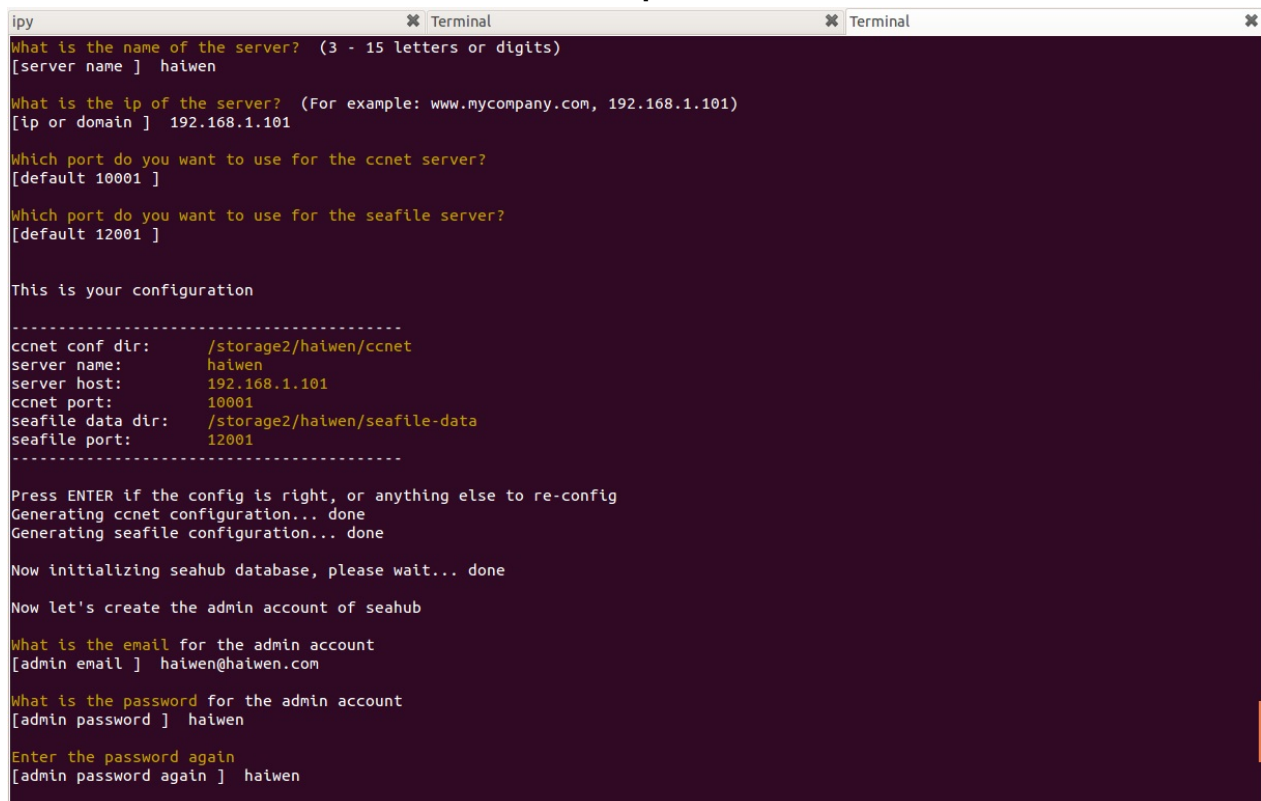
Go to the top level directory(in this guide it's **/data/haiwen/**), and run **seafile-admin setup** to create all the configuration:

```
cd /data/haiwen
export PYTHONPATH=/data/haiwen/seafile-server/seahub/thirdpart
seafile-admin setup
```

The script would ask you a series of questions, and create all the configuration for you.

Name	Usage	Default	Requirement
server name	The name of the server that would be shown on the client		3 ~ 15 letters or digits
ip or domain	The ip address or domain name of the server		Make sure to use the right ip or domain, or the client would have trouble connecting it
ccnet port	the tcp port used by ccnet	10001	
seafile port	tcp port used by seafile	12001	
seafile fileserver port	tcp port used by seafile fileserver	8082	
admin email	Email address of the admin account		
admin password	password of the admin account		

This is a screenshot of the **seafile-admin setup** command:

```
ipy                              ✖ Terminal              ✖ Terminal                              ✖

What is the name of the server?  (3 - 15 letters or digits)
[server name ]  haiwen

What is the ip of the server?  (For example: www.mycompany.com, 192.168.1.101)
[ip or domain ]  192.168.1.101

Which port do you want to use for the ccnet server?
[default 10001 ]

Which port do you want to use for the seafile server?
[default 12001 ]


This is your configuration

----------------------------------------
ccnet conf dir:      /storage2/haiwen/ccnet
server name:         haiwen
server host:         192.168.1.101
ccnet port:          10001
seafile data dir:    /storage2/haiwen/seafile-data
seafile port:        12001
----------------------------------------

Press ENTER if the config is right, or anything else to re-config
Generating ccnet configuration... done
Generating seafile configuration... done

Now initializing seahub database, please wait... done

Now let's create the admin account of seahub

What is the email for the admin account
[admin email ]  haiwen@haiwen.com

What is the password for the admin account
[admin password ]  haiwen

Enter the password again
[admin password again ]  haiwen
```

And a screenshot after setup is finished successfully:

At this time, the directory layout would be like this:

```
haiwen/
└── ccnet # ccnet config directory
    └── ccnet.conf # ccnet config file
└── seafile-data # seafile configuration and data
    └── seafile.conf # seafile config file
└── seahub-data/ # seahub data
└── seahub.db # seahub sqlite3 database
└── seahub_settings.py # custom settings for seahub
└── seafile-server
    └── seahub/
    └── seafile-{VERSION} # seafile source code
```

Start the Seafile Server

After configuration successfully created, run **seafile-admin start** in the top directory to start the all components of Seafile. (**You should always run the seafile-admin script in the top directory**).

```
cd /data/haiwen # go to the top level directory
seafile-admin start
```

At this moment, all the components should be running and seahub can be visited at **http://yourserver-ip-or-domain:8000**

Note You may want to deploy seahub with nginx or apache. In this case, follow the instructions on Deploy Seafile Web With Nginx/Apache.

Stop the Seafile Server

To stop seafile server, run **seafile-admin stop**.

```
cd /data/haiwen # go to the top level directory
seafile-admin stop
```

Upgrade the Seafile Server

When you want to upgrade to a new vesrion of seafile server, you need to:

- Stop the seafile server if it's running

```
cd /data/haiwen
seafile-admin stop
```

- Get and latest source code and build libsearpc/ccnet/seafile, just as what you do in a

fresh setup.
- Run the upgrade script. The upgrade script mainly updates database used by seafile for you. For example, create a new database table that is used in the latest seafile server but not in the previous version.

Get and compile the latest libsearpc/ccnet/seafile

See the **Building** section above.

Get the new seahub tarball and uncompress it

```
cd haiwen/seafile-server
mv seahub/ seahub-old # move away the old seahub folder
tar xf /path/to/new/seahub-x.x.x-server.tar.gz
mv seahub-x.x.x-server seahub
```

Do the upgrade

- copy the scripts/upgrade/ subdir outside

The upgrade scripts is distributed in the `scripts/upgrade` subdir of seafile source code, we need to copy it to **seafile-server** directory before run the scripts.

```
cd /data/haiwen/seafile-server
cp -rf seafile-{version}/scripts/upgrade .
```

Continuous Upgrade (like from 1.1 to 1.2)

Continuous upgrade means to upgrade from one version of seafile server to the next version. For example, upgrading from 1.1.0 to 1.2.0 is a continuous upgrade.

Note: Minor upgrade, like upgrade from 1.3.0 to 1.3.1, is documented in a separate section below.

Say you are upgrading from 1.1.0 to 1.2.0, you should run the script **upgrade_1.1_1.2.sh** in `seafile-server` directory.

```
cd /data/haiwen/seafile-server
./upgrade/upgrade_1.1_1.2.sh
```

Non-continous version upgrade(like from 1.1 to 1.3)

If you upgrade a few versions at once, e.g. from 1.1.0 to 1.3.0. The procedure is:

- upgrade from 1.1.0 to 1.2.0
- upgrade from 1.2.0 to 1.3.0

Just run the upgrade scripts in sequence.

Minor Upgrade (like from 1.3.0 to 1.3.1)

Minor upgrade Minor upgrade is like an upgrade from 1.3.0 to 1.3.1. For this type of upgrade, you only need to update the avatar link:

```
cd /data/haiwen/seafile-server/seahub/media
cp -rf avatars/* ../../../seahub-data/avatars/
rm -rf avatars
ln -s ../../../seahub-data/avatars
```

Problems Report

If you encounter any problem when building/deploying Seafile, please leave us a message or open an issue.

How to Build Seafile Server Release Package for Raspberry Pi

Table of contents:

Setup the build environment

Requirements:

- A raspberry pi with raspian distribution installed.

Install packages

```
sudo apt-get install build-essential
sudo apt-get install libevent-dev libcurl4-openssl-dev libglib2.0-dev uuid-dev intltoo
l libsqlite3-dev libmysqlclient-dev libarchive-dev libtool libjansson-dev valac libfus
e-dev re2c flex python-setuptools cmake
```

Compile development libraries

libevhtp

libevhtp is a http server libary on top of libevent. It's used in seafile file server.

```
git clone https://www.github.com/haiwen/libevhtp.git
cd libevhtp
cmake -DEVHTP_DISABLE_SSL=ON -DEVHTP_BUILD_SHARED=OFF .
make
sudo make install
```

After compiling all the libraries, run `ldconfig` to update the system libraries cache:

```
sudo ldconfig
```

Install python libraries

Create a new directory `/home/pi/dev/seahub_thirdpart` :

```
mkdir -p ~/dev/seahub_thirdpart
```

Download these tarballs to `/tmp/` :

- pytz
- Django
- django-statici18n
- djangorestframework
- django_compressor
- jsonfield
- django-post_office
- gunicorn
- flup
- chardet
- python-dateutil
- six
- django-picklefield
- django-constance
- jdcal
- et_xmlfile
- openpyxl
- futures
- django-formtools
- qrcode

Install all these libaries to `/home/pi/dev/seahub_thirdpart` :

```
cd ~/dev/seahub_thirdpart
export PYTHONPATH=.
easy_install -d . /tmp/pytz-2016.1.tar.gz
easy_install -d . /tmp/Django-1.8.10.tar.gz
easy_install -d . /tmp/django-statici18n-1.1.3.tar.gz
easy_install -d . /tmp/djangorestframework-3.3.2.tar.gz
easy_install -d . /tmp/django_compressor-1.4.tar.gz
easy_install -d . /tmp/jsonfield-1.0.3.tar.gz
easy_install -d . /tmp/django-post_office-2.0.6.tar.gz
easy_install -d . /tmp/gunicorn-19.4.5.tar.gz
easy_install -d . /tmp/flup-1.0.2.tar.gz
easy_install -d . /tmp/chardet-2.3.0.tar.gz
easy_install -d . /tmp/python-dateutil-1.5.tar.gz
easy_install -d . /tmp/six-1.9.0.tar.gz
easy_install -d . /tmp/django-picklefield-0.3.2.tar.gz
wget -O /tmp/django_constance.zip https://github.com/haiwen/django-constance/archive/b
de7f7c.zip
easy_install -d . /tmp/django_constance.zip
easy_install -d . /tmp/jdcal-1.2.tar.gz
easy_install -d . /tmp/et_xmlfile-1.0.1.tar.gz
easy_install -d . /tmp/openpyxl-2.3.0.tar.gz
```

Prepare seafile source code

To build seafile server, there are four sub projects involved:

- libsearpc
- ccnet-server
- seafile-server
- seahub

The build process has two steps:

- First, fetch the tags of each projects, and make a soruce tarball for each of them.
- Then run a `build-server.py` script to build the server package from the source tarballs.

Fetch git tags and prepare source tarballs

Seafile manages the releases in tags on github.

Assume we are packaging for seafile server 6.0.1, then the tags are:

- ccnet-server, seafile-server, and seahub would all have a `v6.0.1-sever` tag.
- libsearpc would have the `v3.0-latest` tag (libsearpc has been quite stable and basically has no further development, so the tag is always `v3.0-latest`)

First setup the `PKG_CONFIG_PATH` enviroment variable (So we don't need to make and make install libsearpc/ccnet/seafile into the system):

```
export PKG_CONFIG_PATH=/home/pi/dev/seafile/lib:$PKG_CONFIG_PATH
export PKG_CONFIG_PATH=/home/pi/dev/libsearpc:$PKG_CONFIG_PATH
export PKG_CONFIG_PATH=/home/pi/dev/ccnet:$PKG_CONFIG_PATH
```

libsearpc

```
cd ~/dev
git clone https://github.com/haiwen/libsearpc.git
cd libsearpc
git reset --hard v3.0-latest
./autogen.sh
./configure
make dist
```

ccnet

```
cd ~/dev
git clone https://github.com/haiwen/ccnet-server.git
cd ccnet
git reset --hard v6.0.1-server
./autogen.sh
./configure
make dist
```

seafile

```
cd ~/dev
git clone https://github.com/haiwen/seafile-server.git
cd seafile
git reset --hard v6.0.1-server
./autogen.sh
./configure
make dist
```

seahub

```
cd ~/dev
git clone https://github.com/haiwen/seahub.git
cd seahub
git reset --hard v6.0.1-server
./tools/gen-tarball.py --version=6.0.1 --branch=HEAD
```

seafobj

```
cd ~/dev
git clone https://github.com/haiwen/seafobj.git
cd seafobj
git reset --hard v6.0.1-server
make dist
```

seafdav

```
cd ~/dev
git clone https://github.com/haiwen/seafdav.git
cd seafdav
git reset --hard v6.0.1-server
make
```

Copy the source tar balls to the same folder

```
mkdir ~/seafile-sources
cp ~/dev/libsearpc/libsearpc-<version>-tar.gz ~/seafile-sources
cp ~/dev/ccnet/ccnet-<version>-tar.gz ~/seafile-sources
cp ~/dev/seafile/seafile-<version>-tar.gz ~/seafile-sources
cp ~/dev/seahub/seahub-<version>-tar.gz ~/seafile-sources

cp ~/dev/seafobj/seafobj.tar.gz ~/seafile-sources
cp ~/dev/seafdav/seafdav.tar.gz ~/seafile-sources
```

Run the packaging script

Now we have all the tarballs prepared, we can run the `build-server.py` script to build the server package.

```
mkdir ~/seafile-server-pkgs
~/dev/seafile/scripts/build-server.py --libsearpc_version=<libsearpc_version> --ccnet_
version=<ccnet_version> --seafile_version=<seafile_version> --seahub_version=<seahub_v
ersion> --srcdir=  --thirdpartdir=/home/pi/dev/seahub_thirdpart --srcdir=/home/pi/seaf
ile-sources --outputdir=/home/pi/seafile-server-pkgs
```

After the script finisheds, we would get a `seafile-server_6.0.1_pi.tar.gz` in `~/seafile-server-pkgs` folder.

Test the built package

Test a fresh install

Use the built seafile server package to go over the steps of Deploying Seafile with SQLite.

The test should cover these steps at least:

- The setup process is ok
- After `seafile.sh start` and `seahub.sh start` , you can login from a browser.
- Uploading/Downloading files through a web browser works correctly.
- Seafile WebDAV server works correctly

Test upgrading from a previous version

- Download the package of the previous version seafile server, and setup it.
- Upgrading according to the manual
- After the upgrade, check the functionality is ok:
  - Uploading/Downloading files through a web browser works correctly.
  - Seafile WebDAV server works correctly

Setup Seafile Server Development Environment

The following operations have been tested on ubuntu-16.04.1-desktop-amd64 system.

Install Necessary Packages

install necessary packages by `apt`

```
sudo apt install ssh libevent-dev libcurl4-openssl-dev libglib2.0-dev uuid-dev intltoo
l libsqlite3-dev libmysqlclient-dev libarchive-dev libtool libjansson-dev valac libfus
e-dev python-dateutil cmake re2c flex sqlite3 python-pip python-simplejson git libssl-
dev libldap2-dev libonig-dev
```

install `libevhtp` from source

```
cd ~/Downloads/
wget https://github.com/haiwen/libevhtp.git
cd libevhtp/
cmake -DEVHTP_DISABLE_SSL=ON -DEVHTP_BUILD_SHARED=OFF .
make
sudo make install
sudo ldconfig
```

Download and Build Seafile

create project root directory *dev*

```
cd
mkdir dev
```

download and install `libsearpc`

```
cd ~/dev/
git clone https://github.com/haiwen/libsearpc.git
cd libsearpc/
./autogen.sh
./configure
make
sudo make install
sudo ldconfig
```

download and install `ccnet-server`

```
cd ~/dev/
git clone https://github.com/haiwen/ccnet-server.git
cd ccnet-server/
git checkout -b v6.0.3-server v6.0.3-server
./autogen.sh
./configure --enable-ldap
make
sudo make install
sudo ldconfig
```

download and install `seafile-server`

```
cd ~/dev/
git clone https://github.com/haiwen/seafile-server.git
cd seafile-server/
git checkout -b v6.0.3-server v6.0.3-server
./autogen.sh
./configure
make
sudo make install
```

download `seahub`

```
cd ~/dev/
git clone https://github.com/haiwen/seahub.git
cd seahub/
git checkout -b v6.0.3-server v6.0.3-server
```

Start `ccnet-server` and `seaf-server`

Start `ccnet-server` and `seaf-server` in two separate terminals.

```
cd ~/dev/seafile-server/tests
ccnet-server -c conf -f -
```

```
cd ~/dev/seafile-server/tests
mkdir seafile-data
touch seafile-data/seafile.conf
seaf-server -c conf -d conf/seafile-data -f -l -
```

The config files and databases (if you use sqlite, which is by default) of `ccnet-server` are located in `~/dev/seafile-server/tests/conf`. This directory is called "ccnet conf directory". The config files, databases and data of `seaf-server` are located in `~/dev/seafile-server/tests/conf/seafile-data`. This directory is called "seafile conf directory".

Start `seahub`

`Seahub` is the web front end of Seafile. It is written in the Django framework, requires Python 2.7 installed on your server.

set environment

```
cd ~/dev/seahub/

cat > setenv.sh << EOF
export CCNET_CONF_DIR=~/dev/seafile-server/tests/conf
export SEAFILE_CONF_DIR=~/dev/seafile-server/tests/conf/seafile-data
export PYTHONPATH=/usr/local/lib/python2.7/dist-packages:thirdpart:\$PYTHONPATH
EOF

sudo chmod u+x setenv.sh
```

install requirements

```
# Expand setenv.sh in the current shell
. setenv.sh
cd ~/dev/seahub/
sudo pip install -r requirements.txt
```

NOTE: if *locale.Error: unsupported locale setting*, you should `export LC_ALL=en_US.UTF-8`

create database and admin account

```
. setenv.sh
python manage.py migrate
python tools/seahub-admin.py # create admin account
```

NOTE: currently, your *ccnet directory* is `~/dev/seafile-server/tests/conf`

run `seahub`

```
python manage.py runserver 0.0.0.0:8000
```

then open browser and navigate to http://127.0.0.1:8000

If you have set up Nginx/Apache to run Seafile, you should run seahub in fastcgi mode.

```
python manage.py runfcgi host=127.0.0.1 port=8000
```

Code Standard

The source code of seafile is ISO/IEC 9899:1999 (E) (a.k.a. C99) compatible.

Indent

- Use only spaces, and indent 4 spaces at a time.

Inline

- Define functions inline only when they are sufficiently small.

Const

- We are using keyword `const` in the source.Please look into the code for detail.

Web API

Seafile Web API V2

API Basics

All API calls must be authenticated with a valid Seafile API key.

```
curl -H 'Authorization: Token 24fd3c026886e3121b2ca630805ed425c272cb96' https://cloud.
seafile.com/api2/auth/ping/
```

The api key can be retrieved by the obtain auth api. See the Quick Start for details.

For each API, we provide `curl` examples to illustrate the usage. We also provide `python`
and `javascript` examples, please refer to https://github.com/haiwen/webapi-examples for
details.

Status Code

- 200: OK

- 201: CREATED
- 202: ACCEPTED
- 301: MOVED_PERMANENTLY
- 400: BAD_REQUEST
- 403: FORBIDDEN
- 404: NOT_FOUND
- 409: CONFLICT
- 429: TOO_MANY_REQUESTS
- 440: REPO_PASSWD_REQUIRED
- 441: REPO_PASSWD_MAGIC_REQUIRED
- 500: INTERNAL_SERVER_ERROR
- 520: OPERATION_FAILED

Quick Start

ping

```
curl https://cloud.seafile.com/api2/ping/

"pong"
```

obtain auth token

```
curl -d "username=username@example.com&password=123456" https://cloud.seafile.com/api2
/auth-token/

{"token": "24fd3c026886e3121b2ca630805ed425c272cb96"}
```

auth ping

```
curl -H 'Authorization: Token 24fd3c026886e3121b2ca630805ed425c272cb96' https://cloud.
seafile.com/api2/auth/ping/

"pong"
```

Account

List Accounts

GET https://cloud.seafile.com/api2/accounts/

Request parameters

- start (default to 0)
- limit (default to 100)
- scope (default None, accepted values: 'LDAP' or 'DB')

To retrieve all users, just set both `start` and `limit` to `-1` .

If scope parameter is passed then accounts will be searched inside the specific scope, otherwise it will be used the old approach: first LDAP and, if no account is found, DB.

Sample request

```
curl -H "Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd" -H 'Accept: ap
plication/json; indent=4' https://cloud.seafile.com/api2/accounts/
```

Sample response

```
[
{
    "email": "foo@foo.com"
},
{
    "email": "bar@bar.com"
}
]
```

Errors

- 403 Permission error, only administrator can perform this action

Get Account Info

GET https://cloud.seafile.com/api2/accounts/{email}/

Request parameters

Sample request

```
curl -v -H "Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd" -H 'Accept:
 application/json; indent=4' https://cloud.seafile.com/api2/accounts/user@mail.com/
```

Sample response

```
{
"is_staff": false,
"is_active": true,
"id": 2,
"create_time": 1356061187741686,
"usage": 651463187,
"total": 107374182400,
"email": "user@mail.com"
}
```

Errors

- 403 Permission error, only administrator can perform this action

Check Account Info

GET https://cloud.seafile.com/api2/account/info/

Sample request

```
curl -H "Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd" -H 'Accept: ap
plication/json; indent=4' https://cloud.seafile.com/api2/account/info/
```

Sample response

```
{
"usage": 26038531,
"total": 104857600,
"email": "user@example.com"
}
```

Errors

- 403 Invalid token

Create Account

PUT https://cloud.seafile.com/api2/accounts/{email}/

Request parameters

- password
- is_staff (defaults to False)
- is_active (defaults to True)

Sample request

```
curl -v -X PUT -d "password=123456" -H "Authorization: Token f2210dacd9c6ccb8133606d94
ff8e61d99b477fd" -H 'Accept: application/json; indent=4' https://cloud.seafile.com/api
2/accounts/newaccount@gmail.com/
```

Sample response

```
...
< HTTP/1.0 201 CREATED
< Location: https://cloud.seafile.com/api2/accounts/newaccount@gmail.com/
...

"success"
```

Success

```
Response code 201(Created) is returned and the Location header provides shared link.
```

Errors

- 403 Permission error, only administrator can perform this action

Update Account

PUT https://cloud.seafile.com/api2/accounts/{email}/

Request parameters

At least one of followings:

- password
- is_staff
- is_active
- name
- note
- storage

Sample request

```
curl -v -X PUT -d "password=654321&is_staff=true&storage=1073741824" -H "Authorization
: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd" -H 'Accept: application/json; indent
=4' https://cloud.seafile.com/api2/accounts/user@mail.com/
```

Sample response

```
...
< HTTP/1.0 200 OK
...

"success"
```

Success

```
Response code 200(OK) is returned.
```

Errors

- 400 Bad Request, keyword password is required
- 403 Permission error, only administrator can perform this action

Migrate Account

POST https://cloud.seafile.com/api2/accounts/{email}/

Request parameters

- op
- to_user this user must exist

Sample request

```
curl -v -d "op=migrate&to_user=user2@mail.com" -H "Authorization: Token f2210dacd9c6cc
b8133606d94ff8e61d99b477fd" -H 'Accept: application/json; indent=4' https://cloud.seaf
ile.com/api2/accounts/user@mail.com/
```

Sample response

```
...
< HTTP/1.0 200 OK
...

"success"
```

Success

```
Response code 200(OK) is returned.
```

Errors

- 400 Bad Request, arguments are missing or invalid
- 403 Permission error, only administrator can perform this action

Delete Account

DELETE https://cloud.seafile.com/api2/accounts/{email}/

Sample request

```
curl -v -X DELETE -H "Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd" -
H 'Accept: application/json; indent=4' https://cloud.seafile.com/api2/accounts/newacco
unt@gmail.com/
```

Sample response

```
"success"
```

Errors

- 403 Permission error, only administrator can perform this action

Get Server Information

GET https://cloud.seafile.com/api2/server-info

Note:

- No authentication required.
- Added in seafile community edition server `4.0.5` or pro edition server `4.0.3`

Sample request

```
curl https://cloud.seafile.com/api2/server-info/
```

Sample response

Sample response from a seafile community edition server:

```
{
    "version": "4.0.6",
    "features": [
    "seafile-basic",
    ]
}
```

Sample response from a seafile pro edition server:

```
{
    "version": "4.0.6",
    "features": [
    "seafile-basic",
    "seafile-pro",
    "office-preview",
    "file-search"
    ]
}
```

Starred Files

List starred files

GET https://cloud.seafile.com/api2/starredfiles/

Sample request

```
curl -H "Authorization: Token f2210dacd9c6ccb8133606d94ff8e6199b477fd" -H 'Accept: app
lication/json; indent=4' https://cloud.seafile.com/api2/starredfiles/
```

Sample response

```
[
{
    "repo": "99b758e6-91ab-4265-b705-925367374cf0",
    "mtime": 1355198150,
    "org": -1,
    "path": "/foo/bar.doc",
    "dir": false,
    "size": 0
},
{
    "repo": "99b758e6-91ab-4265-b705-925367374cf0",
    "mtime": 1353751237,
    "org": -1,
    "path": "/add_folder-blue.png",
    "dir": false,
    "size": 3170
}
]
```

Star A File

POST https://cloud.seafile.com/api2/starredfiles/

Request parameters

- repo_id (post)
- p (post)

Sample request

```
curl -v -d "repo_id=dae8cecc-2359-4d33-aa42-01b7846c4b32&p=/foo.md" -H 'Authorization:
 Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd' -H 'Accept: application/json; charset
=utf-8; indent=4' https://cloud.seafile.com/api2/starredfiles/
```

Sample response

```
...
< HTTP/1.0 201 CREATED
< Location: https://cloud.seafile.com/api2/starredfiles/
...
"success"
```

Success

Response code is 201(Created) and Location header provides url of starred file list.

Errors

- 400 `repo_id` or `p` is missing, or `p` is not valid file path(e.g. /foo/bar/).

Unstar A File

DELETE https://cloud.seafile.com/api2/starredfiles/

Request parameters

- repo_id
- p

Sample request

```
curl -X DELETE -v  -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd'
-H 'Accept: application/json; charset=utf-8; indent=4' 'https://cloud.seafile.com/api2
/starredfiles/?repo_id=dae8cecc-2359-4d33-aa42-01b7846c4b32&p=/foo.md'
```

Sample response

```
...
< HTTP/1.0 200 OK
...
"success"
```

Success

Response code is 200(OK), and a string named "success" is returned.

Errors

- 400 `repo_id` or `p` is missing, or `p` is not valid file path(e.g. /foo/bar/).

Group

List Groups

GET https://cloud.seafile.com/api2/groups/

Sample request

```
curl -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd' "https://cloud
.seafile.com/api2/groups/"
```

Sample response

```
{
    "replynum": 0,
    "groups": [
        {
            "ctime": 1398134171327948,
            "creator": "user@example.com",
            "msgnum": 0,
            "mtime": 1398231100,
            "id": 1,
            "name": "lian"
        },
        {
            "ctime": 1398236081042441,
            "creator": "user@example.com",
            "msgnum": 0,
            "mtime": 0,
            "id": 2,
            "name": "123"
        }
    ]
}
```

Add A Group

PUT https://cloud.seafile.com/api2/groups/

Request parameters

- group_name

Sample request

```
curl -X PUT -d "group_name=newgroup" -H 'Authorization: Token f2210dacd9c6ccb8133606d9
4ff8e61d99b477fd' "https://cloud.seafile.com/api2/groups/"
```

Sample response

```
{"group_id": 3, "success": true}
```

Errors

- 400 There is already a group with that name.

Delete Group

DELETE https://cloud.seafile.com/api2/groups/{group_id}/

Request parameters

None

Sample request

```
curl -X DELETE -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd' "htt
ps://cloud.seafile.com/api2/groups/1/"
```

Success

200 if everything is fine.

Errors

- 400 if ad group id format
- 404 if Group not found
- 403 if Forbid to delete group
- 520 if Failed to remove group (generic error)

Rename Group

POST https://cloud.seafile.com/api2/groups/{group_id}/

Request parameters

- operation (value must be 'rename')
- newname (the new name for the group)

Sample request

```
curl -d "operation=rename&newname=pinkfloyd_lovers" -H 'Authorization: Token f2210dacd
9c6ccb8133606d94ff8e61d99b477fd' "https://cloud.seafile.com/api2/groups/1/"
```

Success

200 if everything is fine.

Errors

- 404 if Group not found
- 403 if Forbid to rename group
- 400 if Newname is missing or if Group name is not valid of if There is already a group with that name or Operation can only be rename.

Group Member

Add A Group Member

PUT https://cloud.seafile.com/api2/groups/{group_id}/members/

Request parameters

- user_name

Sample request

```
curl -X PUT -d "user_name=user@example.com"-H 'Authorization: Token f2210dacd9c6ccb813
3606d94ff8e61d99b477fd' "https://cloud.seafile.com/api2/groups/1/members/"
```

Sample response

```
{"success": true}
```

Errors

- 400 invalid group id
- 403 only administrators can add group members
- 404 unable to find group

Delete A Group Member

DELETE https://cloud.seafile.com/api2/groups/{group_id}/members/

Request parameters

- user_name

Sample request

```
curl -X DELETE -d "user_name=user@example.com" -H 'Authorization: Token f2210dacd9c6cc
b8133606d94ff8e61d99b477fd' "https://cloud.seafile.com/api2/groups/1/members/"
```

Sample response

```
{"success": true}
```

Errors

- 400 invalid group id
- 403 only administrators can remove group members
- 404 unable to find group

Group Message

Get Group Messages

GET https://cloud.seafile.com/api2/group/msgs/{group_id}/

Request parameters

- group_id

Sample request

```
curl -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd' "https://cloud
.seafile.com/api2/group/msgs/1/"
```

Sample response

```
{
    "next_page": -1,
    "msgs": [
        {
            "reply_cnt": 0,
            "timestamp": 1398230602,
            "replies": [],
            "from_email": "user@example.com",
            "msgid": 1,
            "msg": "test discuss",
            "nickname": "user"
        }
    ]
}
```

Get Group Message Detail

GET https://cloud.seafile.com/api2/group/{group_id}/msg/{msg_id}/

Request parameters

- group_id
- msg_id

Sample request

```
curl -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd' "https://cloud
.seafile.com/api2/group/1/msg/1/"
```

Sample response

```
{
    "reply_cnt": 2,
    "timestamp": 1398230602,
    "replies": [
        {
            "msg": "this is another test",
            "timestamp": 1398232319,
            "nickname": "user",
            "msgid": 1,
            "from_email": "user@example.com"
        },
        {
            "msg": "this is another test",
            "timestamp": 1398232508,
            "nickname": "user",
            "msgid": 3,
            "from_email": "user@example.com"
        }
    ],
    "from_email": "user@example.com",
    "msgid": 1,
    "msg": "test discuss",
    "nickname": "user"
}
```

Errors

- 404 message not found

Send A Group Message

POST https://cloud.seafile.com/api2/group/msgs/{group_id}/

Request parameters

- message
- group_id
- repo_id(optional)
- path(optional)

Sample request

```
curl -d "message=this is another test&repo_id=c7436518-5f46-4296-97db-2fcba4c8c8db&path=/123.md" -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd' "https://cloud.seafile.com/api2/group/msgs/1/"
```

Sample response

```
{
    "msgid": 3
}
```

Reply A Group Message

POST https://cloud.seafile.com/api2/group/{group_id}/msg/{msg_id}

Request parameters

- group_id
- msg_id
- message

Sample request

```
curl -d "message=this is a reply" -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd' "https://cloud.seafile.com/api2/group/1/msg/1/"
```

Sample response

```
{
    "msgid": 3
}
```

Errors

- 404 message not found

Get Group Message Replies

GET https://cloud.seafile.com/api2/new_replies/

Sample request

```
curl -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd' "https://cloud
.seafile.com/api2/new_replies/"
```

Sample response

```
[
    {
        "reply_cnt": 1,
        "timestamp": 1398231100,
        "replies": [
            {
                "msg": "@user test reply",
                "timestamp": 1398234493,
                "nickname": "123",
                "msgid": 5,
                "from_email": "user@example.com"
            }
        ],
        "from_email": "user@example.com",
        "att": {
            "repo": "c7436518-5f46-4296-97db-2fcba4c8c8db",
            "path": "/123.md",
            "type": "file",
            "src": "recommend"
        },
        "msgid": 3,
        "msg": "this is another test",
        "nickname": "user"
    }
]
```

Share

File Share Link

List File Share Links

GET https://cloud.seafile.com/api2/shared-links/

Sample request

```
curl -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd' "https://cloud
.seafile.com/api2/shared-links/"
```

Sample response

```
{"fileshares": [{"username": "user@example.com", "repo_id": "a582d3bc-bcf5-421e-9125-7
41fa56d18d4", "ctime": null, "s_type": "d", "token": "e410827494", "view_cnt": 0, "pat
h": "/123/"}, {"username": "user@example.com", "repo_id": "affc837f-7fdd-4e91-b88a-32c
af99897f2", "ctime": null, "s_type": "f", "token": "0ae587a7d1", "view_cnt": 0, "path"
: "/lian123.md"}]}
```

Create File Share Link

PUT https://cloud.seafile.com/api2/repos/{repo-id}/file/shared-link/

Request parameters

- repo-id
- p (Path to the file)
- share_type (optional, `download` or `upload` , default `download`)
- password (optional)
- expire (optional)

Sample request

Create download link for file

```
curl -v  -X PUT -d "p=/foo.md" -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e6
1d99b477fd' -H 'Accept: application/json; indent=4' https://cloud.seafile.com/api2/rep
os/afc3b694-7d4c-4b8a-86a4-89c9f3261b12/file/shared-link/
```

Create download link for directory with password and expire date

```
curl -v  -X PUT -d "password=password&expire=6&p=/123/" -H 'Authorization: Token f2210
dacd9c6ccb8133606d94ff8e61d99b477fd' -H 'Accept: application/json; indent=4' https://c
loud.seafile.com/api2/repos/afc3b694-7d4c-4b8a-86a4-89c9f3261b12/file/shared-link/
```

Create upload link for directory

```
curl -v -X PUT -d "share_type=upload&p=/123/" -H 'Authorization: Token f2210dacd9c6ccb
8133606d94ff8e61d99b477fd' -H 'Accept: application/json; indent=4' https://cloud.seafi
le.com/api2/repos/afc3b694-7d4c-4b8a-86a4-89c9f3261b12/file/shared-link/
```

Sample response

```
...
< HTTP/1.0 201 CREATED
< Location: https://cloud.seafile.com/f/9b437a7e55/
...
```

Success

```
Response code 201(Created) is returned and the Location header provides shared link.
```

Errors

- 400 Path is missing
- 400 Password(if link is encrypted) is missing
- 500 Internal server error

Delete File Share Link

DELETE https://cloud.seafile.com/api2/shared-links/?t=0ae587a7d1

Request parameters

- t

Sample request

```
curl -v -X DELETE -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd' "
https://cloud.seafile.com/api2/shared-links/?t=0ae587a7d1"
```

Sample response

```
...
< HTTP/1.0 200 OK
...
```

Send Share Link Email

POST https://cloud.seafile.com/api2/send-share-link/

Request parameters

- token
- email
- extra_msg (not necessary)

Sample request

```
curl -d "email=sample@eamil.com,invalid-email&token=4cbd625c5e" -H 'Authorization: Tok
en ef12bf1e66a1aa797a1d6556fdc9ae84f1e9249f' -H 'Accept: application/json; indent=4' h
ttps://cloud.seafile.com/api2/send-share-link/
```

Sample response

```
{
    "failed": [
        {
            "email": "invalid-email",
            "error_msg": "email invalid."
        }
    ],
    "success": [
        "sample@eamil.com"
    ]
}
```

Errors

- 400 token/repo_id invalid
- 403 Permission denied.
- 403 Sending shared link failed. Email service is not properly configured, please contact administrator.
- 404 token/library not found

Send Upload Link Email

POST https://cloud.seafile.com/api2/send-upload-link/

Request parameters

- token
- email
- extra_msg (not necessary)

Sample request

```
curl -d "email=sample@eamil.com,invalid-email&token=4cbd625c5e" -H 'Authorization: Tok
en ef12bf1e66a1aa797a1d6556fdc9ae84f1e9249f' -H 'Accept: application/json; indent=4' h
ttps://cloud.seafile.com/api2/send-upload-link/
```

Sample response

```
{
    "failed": [
        {
            "email": "invalid-email",
            "error_msg": "email invalid."
        }
    ],
    "success": [
        "sample@eamil.com"
    ]
}
```

- 400 token/repo_id invalid
- 403 Permission denied.
- 403 Sending shared link failed. Email service is not properly configured, please contact administrator.
- 404 token/library not found

List Direntry in Dir Download Link

GET https://cloud.seafile.com/api2/d/{token}/dir/

Request parameters

- token (upload link token)
- p (sub folder path)
- password (if link is encrypted)

Sample request

```
curl -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd' "https://cloud
.seafile.com/api2/d/3af7c46595/dir/?p=/subfolder/"
```

Sample response

```
[{"mtime": 1436846750, "type": "dir", "name": "sadof", "id": "1806dbdb700b7bcd49e62751
07c7ccf7b3ea1776"}, {"id": "bdb06f6de972c42893fda590ac954988b562429c", "mtime": 143643
1020, "type": "file", "name": "test.mdert", "size": 20}]
```

Shared Libraries

List Shared Libraries

GET https://cloud.seafile.com/api2/shared-repos/

Sample request

```
curl -v -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd' -H 'Accept:
 application/json; indent=4' https://cloud.seafile.com/api2/shared-repos/
```

Sample response

```
[{"repo_id": "7d42522b-1f6f-465d-b9c9-879f8eed7c6c", "share_type": "personal", "permis
sion": "rw", "encrypted": false, "user": "user@example.com", "last_modified": 13610725
00, "repo_desc": "ff", "group_id": 0, "repo_name": "\u6d4b\u8bd5\u4e2d\u6587pdf"}, {"r
epo_id": "79bb29cd-b683-4844-abaf-433952723ca5", "share_type": "group", "permission":
"rw", "encrypted": false, "user": "user@example.com", "last_modified": 1359182468, "re
po_desc": "test", "group_id": 1, "repo_name": "test_enc"}]
```

List Be Shared Libraries

GET https://cloud.seafile.com/api2/beshared-repos/

Sample request

```
curl -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd' "https://cloud
.seafile.com/api2/beshared-repos/"
```

Sample response

```
"[{"user": "user@example.com", "repo_id": "989e3952-9d6f-4427-ab16-4bf9b53212eb", "sha
re_type": "personal", "permission": "rw", "encrypted": false, "repo_desc": "lib shared
 to imwhatiam", "enc_version": false, "last_modified": 1398218747, "is_virtual": false
, "group_id": 0, "repo_name": "lib shared to imwhatiam"}]"
```

Share A Library

PUT https://cloud.seafile.com/api2/shared-repos/{repo-id}/

Request parameters

- share_type ('personal', 'group' or 'public')
- user (or users)
- group_id
- permission

If share_type is 'personal' then 'user' or 'users' param are required, if share_type is 'group' then 'group_id' parameter is required. If share_type is 'public' no other params is required.

'user' or 'users' parameters can be a comma separated list of emails, in this case the share will be done for more users at the same time. If a problem is encountered during multiple users sharing then the sharing process is aborted.

Sample request

```
curl -X PUT -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd' "https:
//cloud.seafile.com/api2/shared-repos/7d42522b-1f6f-465d-b9c9-879f8eed7c6c/?share_type
=group&user=user@example.com&group_id=1&permission=rw"
```

Sample response

```
"success"
```

Unshare A Library

DELETE https://cloud.seafile.com/api2/shared-repos/{repo-id}/

Request parameters

- share_type ('personal', 'group' or 'public')
- user
- group_id

If share_type is 'personal' then 'user' param is required, if share_type is 'group' then 'group_id' parameter is required. If share_type is 'public' no other params is required.

Sample request

```
curl -X DELETE -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd' "htt
ps://cloud.seafile.com/api2/shared-repos/7d42522b-1f6f-465d-b9c9-879f8eed7c6c/?share_t
ype=personal&user=user@example.com&group_id=0"
```

Sample response

```
"success"
```

Library

Library

Get Default Library

GET https://cloud.seafile.com/api2/default-repo/

Sample request

```
curl -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd' "https://cloud
.seafile.com/api2/default-repo/"
```

Sample response

```
{
    "repo_id": "691b3e24-d05e-43cd-a9f2-6f32bd6b800e",
    "exists": true
}
```

Create Default Library

POST https://cloud.seafile.com/api2/default-repo/

Sample request

```
curl -X POST -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd' "https
://cloud.seafile.com/api2/default-repo/"
```

Sample response

```
{
    "repo_id": "691b3e24-d05e-43cd-a9f2-6f32bd6b800e",
    "exists": true
}
```

List Libraries

GET https://cloud.seafile.com/api2/repos/

Sample request

```
curl -H 'Authorization: Token 24fd3c026886e3121b2ca630805ed425c272cb96' -H 'Accept: ap
plication/json; indent=4' https://cloud.seafile.com/api2/repos/
```

Sample response

```
[
{
    "permission": "rw",
    "encrypted": false,
    "mtime": 1400054900,
    "owner": "user@mail.com",
    "id": "f158d1dd-cc19-412c-b143-2ac83f352290",
    "size": 0,
    "name": "foo",
    "type": "repo",
    "virtual": false,
    "desc": "new library",
    "root": "0000000000000000000000000000000000000000"
},
{
    "permission": "rw",
    "encrypted": false,
    "mtime": 1400054802,
    "owner": "user@mail.com",
    "id": "0536b11a-a5fd-4482-9314-728cb3472f54",
    "size": 0,
    "name": "foo",
    "type": "repo",
    "virtual": false,
    "desc": "new library",
    "root": "0000000000000000000000000000000000000000"
}
]
```

Get Library Info

GET https://cloud.seafile.com/api2/repos/{repo-id}/

Request parameters

- repo-id

Sample request

```
curl -G -H 'Authorization: Token 24fd3c026886e3121b2ca630805ed425c272cb96' -H 'Accept:
 application/json; indent=4' https://cloud.seafile.com/api2/repos/632ab8a8-ecf9-4435-9
3bf-f495d5bfe975/
```

Sample response

```json
{
"encrypted": false,
"password_need": null,
"mtime": null,
"owner": "self",
"id": "632ab8a8-ecf9-4435-93bf-f495d5bfe975",
"size": 1356155,
"name": "org",
"root": "b5227040de360dd22c5717f9563628fe5510cbce",
"desc": "org file",
"type": "repo"
}
```

Get Library Owner

GET https://cloud.seafile.com/api2/repos/{repo-id}/owner/

Request parameters

- repo-id

Sample request

```
curl -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d9b477fd' -H 'Accept: app
lication/json; indent=4' https://cloud.seafile.com/api2/repos/dae8cecc-2359-4d33-aa42-
01b7846c4b32/owner/
```

Sample response

```json
{
"owner": "user@example.com"
}
```

Errors

- 403 Permission error, only administrator can perform this action

Get Library History

GET https://cloud.seafile.com/api2/repos/{repo-id}/history/

Request parameters

- repo-id

Sample request

```
curl -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d9b477fd' -H 'Accept: app
lication/json; indent=4' https://cloud.seafile.com/api2/repos/dae8cecc-2359-4d33-aa42-
01b7846c4b32/history/
```

Sample response

```
{"commits": [{"rev_file_size": 0, "rev_file_id": null, "ctime": 1398045167, "creator_n
ame": "imwhatiam123@gmail.com", "creator": "0000000000000000000000000000000000000000",
 "root_id": "ca2625da6be6e211ddd584615ef3bfaa531e66aa", "rev_renamed_old_path": null,
"parent_id": "205c469f0830df09b13024601524058757a43128", "new_merge": false, "repo_id"
: "691b3e24-d05e-43cd-a9f2-6f32bd6b800e", "desc": "Modified \"api.md\"", "id": "eb6272
1812e0c3122889b5facde971b353ad176b", "conflict": false, "second_parent_id": null}, {"r
ev_file_size": 0, "rev_file_id": null, "ctime": 1398045158, "creator_name": "imwhatiam
123@gmail.com", "creator": "0000000000000000000000000000000000000000", "root_id": "0b7
a31adf4ea8b29ad5a5920420b548da11dd32f", "rev_renamed_old_path": null, "parent_id": "2b
a85ee6072efea51a3483843ea7de9b6d1d1eb2", "new_merge": false, "repo_id": "691b3e24-d05e
-43cd-a9f2-6f32bd6b800e", "desc": "Added \"api.md\"", "id": "205c469f0830df09b13024601
524058757a43128", "conflict": false, "second_parent_id": null}], "page_next": false}
```

Create Library

POST https://cloud.seafile.com/api2/repos/

Request parameters

- name
- desc (defaults to "new repo")
- passwd (needed by encrypt library)

Sample request

```
curl -v -d "name=foo&desc=new library" -H 'Authorization: Token f2210dacd9c6ccb8133606
d94ff8e61d99b477fd' -H 'Accept: application/json; indent=4' https://cloud.seafile.com/
api2/repos/
```

Sample response

```
{
"encrypted": "",
"enc_version": 0,
"repo_id": "f15811fd-5c19-412c-b143-2ac83f352290",
"magic": "",
"relay_id": "c5e41170db250ea497075e2911104faf0105b7fb",
"repo_version": 1,
"relay_addr": "cloud.seafile.com",
"token": "c1f3defe9ba408cd7964427ec276843e9d10c23b",
"relay_port": "10001",
"random_key": "",
"email": "user@mail.com",
"repo_name": "foo"
}
```

Success

Response code 200 and newly created library information are returned.

Errors

- 400 Library name missing.
- 520 Operation failed.

Check/Create Sub Library

check if a dir has a corresponding sub_repo, if it does not have, create one

GET https://cloud.seafile.com/api2/repos/{repo-id}/dir/sub_repo/?p=/\&name=sub_lib

Request parameters

- repo-id
- p
- name

Sample request

```
curl -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d9b477fd' -H 'Accept: app
lication/json; indent=4' https://cloud.seafile.com/api2/repos/dae8cecc-2359-4d33-aa42-
01b7846c4b32/dir/sub_repo/?p=/\&name=sub_lib
```

Sample response

```
{"sub_repo_id": "c0a3283c-013c-4a7c-8f68-006f06fa6dec"}
```

Errors

- 400 Argument missing

- 500 INTERNAL SERVER ERROR

Delete Library

DELETE https://cloud.seafile.com/api2/repos/{repo-id}/

Sample request

```
curl -v -X DELETE -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd' -
H 'Accept: application/json; indent=4' https://cloud.seafile.com/api2/repos/8f5f2222-7
2a8-454f-ac40-8397c5a556a8/
```

Sample response

"success"

Errors

- 400 Library does not exist.

- 403 Only library owner can perform this operation.

Rename Library

POST https://cloud.seafile.com/api2/repos/{repo-id}/?op=rename

Sample request

```
curl -d "repo_name=new-repo-name"  -H 'Authorization: Token f2210dacd9c6ccb8133606d94f
f8e61d99b477fd' -H 'Accept: application/json; indent=4' https://cloud.seafile.com/api2
/repos/8f5f2222-72a8-454f-ac40-8397c5a556a8/op=rename
```

Sample response

"success"

Errors

- 404 Library not found.

- 403 You do not have permission to rename this library.

- 500 Unable to rename library

Decrypt Library

POST https://cloud.seafile.com/api2/repos/{repo-id}/

Request parameters

- password

Sample request

```
curl -v -d "password=123" -H 'Authorization: Token e6a33d61954f219a96b60f635cf02717964
e4385' -H 'Accept: application/json; indent=4' https://cloud.seafile.com/api2/repos/0c
2465a5-4753-4660-8a22-65abec9ec8d0/
```

Sample response

"success"

Errors

- 400 Incorrect password
- 409 Repo is not encrypt
- 500 Internal server error

Create Public Library

POST https://cloud.seafile.com/api2/repos/{repo-id}/public/

Request parameters

- repo-id

Sample request

```
curl -X POST -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d9b477fd' -H 'Acc
ept: application/json; indent=4' https://cloud.seafile.com/api2/repos/dae8cecc-2359-4d
33-aa42-01b7846c4b32/public/
```

Sample response

```
...
< HTTP/1.0 200 OK
...
```

Success

```
Response code is 200(OK), and a string "success" is returned.
```

Errors

- 404 Repo not found
- 403 Forbid to access this repo
- 500 INTERNAL SERVER ERROR, Unable to make repo public

Remove Public Library

DELETE https://cloud.seafile.com/api2/repos/{repo-id}/public/

Request parameters

- repo-id

Sample request

```
curl -X DELETE -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d9b477fd' -H 'A
ccept: application/json; indent=4' https://cloud.seafile.com/api2/repos/dae8cecc-2359-
4d33-aa42-01b7846c4b32/public/
```

Sample response

```
...
< HTTP/1.0 200 OK
...
```

Success

```
Response code is 200(OK), and a string "success" is returned.
```

Errors

- 404 Repo not found
- 403 Forbid to access this repo
- 500 INTERNAL SERVER ERROR, Unable to remove public repo

Fetch library download info

GET https://cloud.seafile.com/api2/repos/{repo-id}/download-info/

Request parameters

- repo-id

Sample request

```
curl -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d9b477fd' -H 'Accept: app
lication/json; indent=4' https://cloud.seafile.com/api2/repos/dae8cecc-2359-4d33-aa42-
01b7846c4b32/download-info/
```

Sample response

```
{
"applet_root": "https://localhost:13420",
"relay_addr": "localhost",
"token": "46acc4d9ca3d6a5c7102ef379f82ecc1edc629e1",
"repo_id": "dae8cecc-2359-4d33-aa42-01b7846c4b32",
"relay_port": "10002",
"encrypted": "",
"repo_name": "test",
"relay_id": "8e4b13b49ca79f35732d9f44a0804940d985627c",
"email": "user@example.com"
}
```

List Virtual Libraries

GET https://cloud.seafile.com/api2/virtual-repos/

Sample request

```
curl -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd' "https://cloud
.seafile.com/api2/virtual-repos/"
```

Sample response

```
{"virtual-repos":
    [
        {"virtual_perm": "rw", "store_id": null, "worktree_invalid": false, "encrypted
": false, "origin_repo_name": "lian", "last_modify": 0, "no_local_history": false, "he
ad_branch": null, "last_sync_time": 0, "id": "51344de8-456f-4dc7-ac08-718827994252", "
size": 0, "share_permission": null, "worktree_changed": false, "worktree_checktime": 0
, "origin_path": "/lian", "is_virtual": true, "origin_repo_id": "a582d3bc-bcf5-421e-91
25-741fa56d18d4", "version": 1, "random_key": null, "is_original_owner": true, "shared
_email": null, "enc_version": 0, "head_cmmt_id": "bc666fdc60d2352b9f6a0324ac64168d4372
4eed", "desc": null, "index_corrupted": false, "magic": null, "name": "lian", "worktre
e": null, "auto_sync": false, "relay_id": null},
        {"virtual_perm": "rw", "store_id": null, "worktree_invalid": false, "encrypted
": false, "origin_repo_name": "lian", "last_modify": 0, "no_local_history": false, "he
ad_branch": null, "last_sync_time": 0, "id": "c0a3283c-013c-4a7c-8f68-006f06fa6dec", "
size": 0, "share_permission": null, "worktree_changed": false, "worktree_checktime": 0
, "origin_path": "/", "is_virtual": true, "origin_repo_id": "a582d3bc-bcf5-421e-9125-7
41fa56d18d4", "version": 1, "random_key": null, "is_original_owner": true, "shared_ema
il": null, "enc_version": 0, "head_cmmt_id": "ff18229aadc9acc73ad481278d5b4c42b3353aa0
", "desc": null, "index_corrupted": false, "magic": null, "name": "123", "worktree": n
ull, "auto_sync": false, "relay_id": null}
    ]
}
```

Search Libraries

GET https://cloud.seafile.com/api2/search/

Request parameters

- q
- per_page (optional)

Sample request

```
curl -G -H 'Authorization: Token 24fd3c026886e3121b2ca630805ed425c272cb96' -H 'Accept:
 application/json; indent=4' https://cloud.seafile.com/api2/search/?q=keyword
```

Sample response

```
{
    "has_more": false,
    "total": 3,
    "results": [
        {
            "repo_id": "691b3e24-d05e-43cd-a9f2-6f32bd6b800e",
            "name": "api.md",
            "oid": "8ea78453bb474359cd9d8e2c4c4d8d9cbdcef0a2",
            "last_modified": 1398045167,
            "fullpath": "/api.md",
            "size": 18939
        },
        {
            "repo_id": "c5509062-9bca-4933-a7e0-c6da1d5f82be",
            "name": "home.md",
            "oid": "dda57aaffa5179829e064c7d0c142f47a8a65d3b",
            "last_modified": 1397096831,
            "fullpath": "/home.md",
            "size": 1954
        },
        {
            "repo_id": "c5509062-9bca-4933-a7e0-c6da1d5f82be",
            "name": "\u5e38\u89c1\u5b89\u88c5\u95ee\u9898.md",
            "oid": "8573f982eeb478b932a55ec13218f4f90a7c5a27",
            "last_modified": 1397188959,
            "fullpath": "/\u5e38\u89c1\u5b89\u88c5\u95ee\u9898.md",
            "size": 1050
        }
    ]
}
```

Errors

- 404 Search not supported.
- 400 Missing argument q.

File

View File Through Owa

GET https://cloud.seafile.com/api2/repos/{repo-id}/owa-file/?path=/foo.docx

Request parameters

- repo-id
- path

Sample request

```
curl  -v  -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd' -H 'Accep
t: application/json; charset=utf-8; indent=4' 'https://cloud.seafile.com/api2/repos/da
e8cecc-2359-4d33-aa42-01b7846c4b32/owa-file/?path=/foo.docx'
```

Sample response

```
{
    "access_token": "7decacff-6e55-4856-9734-01aaab26ef45",
    "action_url": "http://off1.off.com/wv/wordviewerframe.aspx?WOPIsrc=http%3A%2F%2F19
2.168.1.124%3A8000%2Fapi2%2Fwopi%2Ffiles%2F2b0750085925fa85238e5f64cfd13ed6f1076bfd%2F
",
    "access_token_ttl": 1456906784000
}
```

After get response

In order to instantiate the Office Online applications, a host must create an HTML page that will host an iframe element within it pointing to a particular WOPI action URL. And then use a form element and POST the `access_token` and `access_token_ttl` values to the Office Online.

For more info, you can see this official docs.

Errors

- 400 path invalid.
- 403 permission denied.
- 403 Library encrypted.
- 403 Office Web App feature not enabled.
- 403 Office Web App feature only supported in professional edition.
- 404 File/Library not found.
- 500 Internal Server Error

Download File

GET https://cloud.seafile.com/api2/repos/{repo-id}/file/?p=/foo

Request parameters

- repo-id
- p
- reuse (optional): Set `reuse` to `1` if you want the generated download link can be accessed more than once in one hour.

Sample request

```
curl -v -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd' -H 'Accept: application/json; charset=utf-8; indent=4' 'https://cloud.seafile.com/api2/repos/dae8cecc-2359-4d33-aa42-01b7846c4b32/file/?p=/foo.c&reuse=1'
```

Sample response

```
"https://cloud.seafile.com:8082/files/adee6094/foo.c"
```

Errors

- 400 Path is missing
- 404 File not found
- 520 Operation failed.

Get File Detail

GET https://cloud.seafile.com/api2/repos/{repo-id}/file/detail/?p=/foo.c

- repo-id
- p

Sample request

```
curl -H 'Authorization: Token f2210dacd3606d94ff8e61d99b477fd' -H 'Accept: application/json; charset=utf-8; indent=4' https://cloud.seafile.com/api2/repos/dae8cecc-2359-4d33-aa42-01b7846c4b32/file/detail/?p=/foo.c
```

Sample response

```
{
"id": "013d3d38fed38b3e8e26b21bb3463eab6831194f",
"mtime": 1398148877,
"type": "file",
"name": "foo.py",
"size": 22
}
```

Errors

- 400 Path is missing
- 520 Operation failed.

Get File History

GET https://cloud.seafile.com/api2/repos/{repo-id}/file/history/?p=/foo.c

Request parameters

- repo-id
- p

Sample request

```
curl -H 'Authorization: Token f2210dacd3606d94ff8e61d99b477fd' -H 'Accept: application
/json; charset=utf-8; indent=4' https://cloud.seafile.com/api2/repos/dae8cecc-2359-4d3
3-aa42-01b7846c4b32/file/history/?p=/foo.c
```

Sample response

```
{
"commits":
    [
        {
        "rev_file_size": 0,
        "repo_id": "a582d3bc-bcf5-421e-9125-741fa56d18d4",
        "ctime": 1398149763,
        "creator_name": "user@example.com",
        "creator": "0000000000000000000000000000000000000000",
        "root_id": "b64d413d9894c9206beac3faf9c2a0d75b4a8ebf",
        "rev_renamed_old_path": null,
        "parent_id": "8e546762e1657ab22dad83e9cb1e5ea31a767c9a",
        "new_merge": false,
        "version": 1,
        "conflict": false,
        "desc": "Added \"foo.c\"",
        "id": "9464f7499bfa7363d563282361339eaf96a93318",
        "rev_file_id": "0000000000000000000000000000000000000000",
        "second_parent_id": null
        },
        {
        "rev_file_size": 0,
        "repo_id": "a582d3bc-bcf5-421e-9125-741fa56d18d4",
        "ctime": 1398146059,
        "creator_name": "user@example.com",
        "creator": "0000000000000000000000000000000000000000",
        "root_id": "572413414257c76039897e00aeb35f819471206b",
        "rev_renamed_old_path": null,
        "parent_id": "f977bdb0ebb205645c3b42216c2817e511c3f68f",
        "new_merge": false,
        "version": 1,
        "conflict": false,
        "desc": "Added \"foo.c\"",
        "id": "a1ec20709675f4dc8db825cdbca296be245d189b",
        "rev_file_id": "0000000000000000000000000000000000000000",
        "second_parent_id": null
        }
    ]
}
```

Errors

- 400 Path is missing
- 404 File not found

Download File From a Revision

GET https://cloud.seafile.com/api2/repos/{repo-id}/file/revision/?
p=/foo.c&commit_id=a1ec20709675f4dc8db825cdbca296be245d189b

Request parameters

- repo-id
- p
- commit_id

Sample request

```
curl -H 'Authorization: Token f2210dacd3606d94ff8e61d99b477fd' -H 'Accept: application
/json; charset=utf-8; indent=4' https://cloud.seafile.com/api2/repos/dae8cecc-2359-4d3
3-aa42-01b7846c4b32/file/revision/?p=/foo.c\&commit_id=a1ec20709675f4dc8db825cdbca296b
e245d189b
```

Sample response

```
"https://cloud.seafile.com:8082/files/adee6094/foo.c"
```

Errors

- 400 Path is missing
- 404 Revision not found

Create File

POST https://cloud.seafile.com/api2/repos/{repo-id}/file/?p=/foo.c

Request parameters

- repo-id
- p
- operation

Sample request

```
curl -v -d "operation=create" -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61
d99b477fd' -H 'Accept: application/json; charset=utf-8; indent=4' https://cloud.seafil
e.com/api2/repos/dae8cecc-2359-4d33-aa42-01b7846c4b32/file/?p=/foo.c
```

Sample response

```
...
< HTTP/1.1 201 CREATED
...
"success"
```

Success

Response code is 201, and a string `"success"` is returned.

Errors

- 403 FORBIDDEN, You do not have permission to move file
- 520 OPERATION FAILED, fail to create file

Rename File

POST https://cloud.seafile.com/api2/repos/{repo-id}/file/?p=/foo.c

Request parameters

- repo-id
- p
- operation=rename
- newname

Sample request

```
curl -v -d "operation=rename&newname=newfoo.c" -H 'Authorization: Token f2210dacd9c6cc
b8133606d94ff8e61d99b477fd' -H 'Accept: application/json; charset=utf-8; indent=4' htt
ps://cloud.seafile.com/api2/repos/dae8cecc-2359-4d33-aa42-01b7846c4b32/file/?p=/foo.c
```

Sample response

```
...
< HTTP/1.1 301 MOVED PERMANENTLY
...
"success"
```

Success

Response code is 301, and a string `"success"` is returned.

Errors

- 400 BAD REQUEST, Path is missing or invalid(e.g. p=/) or newname is missing(newname too long)
- 403 FORBIDDEN, You do not have permission to rename file
- 404 NOT FOUND, repo not found
- 409 CONFLICT, the newname is the same to the old
- 520 OPERATION FAILED, fail to rename file

Lock File

PUT https://cloud.seafile.com/api2/repos/{repo-id}/file/

Request parameters

- repo-id
- p
- operation

Sample request

```
curl -v -X PUT -d "operation=lock&p=/foo.c" -H 'Authorization: Token f2210dacd9c6ccb81
33606d94ff8e61d99b477fd' -H 'Accept: application/json; charset=utf-8; indent=4' https:
//cloud.seafile.com/api2/repos/dae8cecc-2359-4d33-aa42-01b7846c4b32/file/
```

Sample response

```
...
< HTTP/1.0 200 OK
...
"success"
```

Success

Response code is 200, and a string `"success"` is returned.

Errors

- 400 BAD REQUEST, Path is missing or invalid(e.g. p=/)
- 403 FORBIDDEN, You do not have permission to lock file
- 404 NOT FOUND, repo not found
- 520 OPERATION FAILED, fail to lock file

Unlock File

PUT https://cloud.seafile.com/api2/repos/{repo-id}/file/

Request parameters

- repo-id
- p
- operation

Sample request

```
curl -v -X PUT -d "operation=unlock&p=/foo.c" -H 'Authorization: Token f2210dacd9c6ccb
8133606d94ff8e61d99b477fd' -H 'Accept: application/json; charset=utf-8; indent=4' http
s://cloud.seafile.com/api2/repos/dae8cecc-2359-4d33-aa42-01b7846c4b32/file/
```

Sample response

```
...
< HTTP/1.0 200 OK
...
"success"
```

Success

Response code is 200, and a string `"success"` is returned.

Errors

- 400 BAD REQUEST, Path is missing or invalid(e.g. p=/)
- 403 FORBIDDEN, You do not have permission to lock file
- 404 NOT FOUND, repo not found
- 520 OPERATION FAILED, fail to unlock file

Move File

POST https://cloud.seafile.com/api2/repos/{repo-id}/file/?p=/foo.c

Request parameters

- repo-id
- p
- operation
- dst_repo
- dst_dir

Sample request

```
curl -v -d "operation=move&dst_repo=affc837f-7fdd-4e91-b88a-32caf99897f2&dst_dir=/" -H
 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd' -H 'Accept: applicati
on/json; charset=utf-8; indent=4' https://cloud.seafile.com/api2/repos/dae8cecc-2359-4
d33-aa42-01b7846c4b32/file/?p=/foo.c
```

Sample response

```
...
< HTTP/1.1 301 MOVED PERMANENTLY
...
"success"
```

Success

Response code is 301, and a string `"success"` is returned.

Errors

- 400 BAD REQUEST, Path is missing or invalid(e.g. p=/)
- 403 FORBIDDEN, You do not have permission to move file
- 404 NOT FOUND, repo not found
- 500 INTERNAL SERVER ERROR

Copy File

POST https://cloud.seafile.com/api2/repos/{repo-id}/file/?p=/foo.c

Request parameters

- repo-id
- p
- operation
- dst_repo
- dst_dir

Sample request

```
curl -v -d "dst_repo=73ddb2b8-dda8-471b-b7a7-ca742b07483c&dst_dir=/&file_names=foo.c"
-H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd' https://cloud.seafi
le.com/api2/repos/c7436518-5f46-4296-97db-2fcba4c8c8db/file/?p=/foo.c
```

Sample response

```
...
< HTTP/1.1 200 OK
...
"success"
```

Success

Response code is 200, and a string `"success"` is returned.

Errors

- 400 BAD REQUEST, Path is missing or invalid(e.g. p=/)
- 403 FORBIDDEN, You do not have permission to copy file
- 500 INTERNAL SERVER ERROR

Revert File

PUT https://cloud.seafile.com/api2/repos/{repo_id}/file/revert/

Request parameters

- repo_id

- p
- commit_id

Sample request

```
curl -v -X PUT -d "commit_id=a1ec20709675f4dc8db825cdbca296be245d189b&p=/foo.c" -H "Au
thorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd" -H 'Accept: application/j
son; indent=4' https://cloud.seafile.com/api2/repos/8f5f2222-72a8-454f-ac40-8397c5a556
a8/file/revert/
```

Sample response

```
...
< HTTP/1.0 200 OK
...

{"ret": 0}
```

Success

```
Response code 200(OK) is returned.
```

Errors

- 400 Path is missing

Delete File

DELETE https://cloud.seafile.com/api2/repos/{repo-id}/file/?p=/foo

Request parameters

- repo-id
- p

Sample request

```
curl -X DELETE -v  -H 'Authorization: Token f2210dacd3606d94ff8e61d99b477fd' -H 'Accep
t: application/json; charset=utf-8; indent=4' https://cloud.seafile.com/api2/repos/dae
8cecc-2359-4d33-aa42-01b7846c4b32/file/?p=/foo.c
```

Sample response

```
...
< HTTP/1.0 200 OK
...
"success"
```

Errors

- 400 Path is missing
- 520 Operation failed.

Note

This can also be used to delete directory.

Upload File

Get Upload Link

GET https://cloud.seafile.com/api2/repos/{repo-id}/upload-link/?p=/upload-dir

Request parameters

- repo-id
- p (use '/' as default)

Sample request

```
curl -H "Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd" https://cloud.
seafile.com/api2/repos/99b758e6-91ab-4265-b705-925367374cf0/upload-link/
```

Sample response

```
"http://cloud.seafile.com:8082/upload-api/73c5d117-3bcf-48a0-aa2a-3f48d5274ae3"
```

Errors

```
403 Permission denied.
500 Run out of quota
```

Upload File

After getting the upload link, POST to this link for uploading files.

POST http://cloud.seafile.com:8082/upload-api/73c5d117-3bcf-48a0-aa2a-3f48d5274ae3

Errors

```
400 Bad request
440 Invalid filename
500 Internal server error
```

Sample request

```
curl -H "Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd" -F file=@test.
txt -F filename=test.txt -F parent_dir=/ http://cloud.seafile.com:8082/upload-api/73c5
d117-3bcf-48a0-aa2a-3f48d5274ae3
```

Sample response

```
"adc83b19e793491b1c6ea0fd8b46cd9f32e592fc"
```

Note

- New uploaded file's name will be 'test(1).text' if a file with name 'test.txt' already exists in parent directory

- For python client uploading, see https://github.com/haiwen/webapi-examples/blob/master/python/upload-file.py, or it can be done much more easily with elegant python requests library, see https://github.com/haiwen/webapi-examples/blob/master/python/upload-file2.py

Update file

Get Update Link

GET https://cloud.seafile.com/api2/repos/{repo-id}/update-link/?p=/update-dir

Request parameters

- repo-id
- p (use '/' as default)

Sample request

```
curl -H "Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd" https://cloud.
seafile.com/api2/repos/99b758e6-91ab-4265-b705-925367374cf0/update-link/
```

Sample response

```
"http://cloud.seafile.com:8082/update-api/e69e5ee7-9329-4f42-bf1b-12879bd72c28"
```

Errors

```
403 Permission denied.
500 Run out of quota
```

Update File

After getting the update link, POST to this link for updating files.

POST http://cloud.seafile.com:8082/update-api/e69e5ee7-9329-4f42-bf1b-12879bd72c28

Request parameters

- target_file

Sample request

```
curl -H "Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd" -F file=@test.
txt -F filename=test.txt -F target_file=/test.txt http://cloud.seafile.com:8082/update
-api/e69e5ee7-9329-4f42-bf1b-12879bd72c28
```

Returns

The id of the updated file

Sample response

```
"adc83b19e793491b1c6ea0fd8b46cd9f32e592fc"
```

Errors

- 400 Bad request
- 440 Invalid filename
- 500 Internal server error

Get Upload Blocks Link

GET https://cloud.seafile.com/api2/repos/{repo-id}/upload-blks-link/

Request parameters

- repo-id

Sample request

```
curl -H "Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd" https://cloud.
seafile.com/api2/repos/99b758e6-91ab-4265-b705-925367374cf0/upload-blks-link/
```

Sample response

```
"https://cloud.seafile.com/seafhttp/upload-blks-api/569213db-7297-457a-907d-e2259a277c
05"
```

Errors

- 403 Can not access repo
- 520 above quota

Get Update Blocks Link

GET https://cloud.seafile.com/api2/repos/{repo-id}/update-blks-link/

Request parameters

- repo-id

Sample request

```
curl -H "Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd" https://cloud.
seafile.com/api2/repos/99b758e6-91ab-4265-b705-925367374cf0/update-blks-link/
```

Sample response

```
"https://cloud.seafile.com/seafhttp/update-blks-api/402c6d48-fe52-4592-97dd-85f462f03d
66"
```

Errors

- 403 Can not access repo
- 520 above quota

Directory

List Directory Entries

GET https://cloud.seafile.com/api2/repos/{repo-id}/dir/

- repo-id
- p (optional): The path to a directory. If `p` is missing, then defaults to '/' which is the top directory.
- oid (optional): The object id of the directory. The object id is the checksum of the directory contents.
- t (optional): If set `t` argument as `f`, will only return file entries, and `d` for only dir entries.
- recursive (optional): If set `t` argument as `d` **AND** `recursive` argument as `1`, return all dir entries recursively

Sample request

```
curl -H "Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d9b477fd" -H 'Accept: app
lication/json; indent=4' https://cloud.seafile.com/api2/repos/99b758e6-91ab-4265-b705-
925367374cf0/dir/?p=/foo
```

Sample response

If oid is the same as the current oid of the directory, returns `"uptodate"` , else returns

```
[
{
    "id": "0000000000000000000000000000000000000000",
    "type": "file",
    "name": "test1.c",
    "size": 0
},
{
    "id": "e4fe14c8cda2206bb9606907cf4fca6b30221cf9",
    "type": "dir",
    "name": "test_dir"
}
]
```

Errors

- 404 The path is not exist.
- 440 Repo is encrypted, and password is not provided.
- 520 Operation failed..

Create New Directory

POST https://cloud.seafile.com/api2/repos/{repo-id}/dir/

- repo-id
- p
- operation=mkdir (post)

Sample request

```
curl -d  "operation=mkdir" -v  -H 'Authorization: Tokacd9c6ccb8133606d94ff8e61d99b477f
d' -H 'Accept: application/json; charset=utf-8; indent=4' https://cloud.seafile.com/ap
i2/repos/dae8cecc-2359-4d33-aa42-01b7846c4b32/dir/?p=/foo
```

Sample response

```
...
< HTTP/1.0 201 CREATED
< Location: https://cloud.seafile.com/api2/repos/dae8cecc-2359-4d33-aa42-01b7846c4b32/
dir/?p=/foo
...

"success"
```

Success

Response code 201(Created) is returned, and Location header provides the url of created directory.

Errors

- 400 Path is missing or invalid(e.g. p=/)
- 520 Operation failed.

Notes

Newly created directory will be renamed if the name is duplicated.

Rename Directory

POST https://cloud.seafile.com/api2/repos/{repo-id}/dir/?p=/foo

Parameters

- repo-id
- p (path)
- operation=rename
- newname (the new name of the directory)

Sample request

```
curl -d  "operation=rename&newname=pinkfloyd_newfolder" -v  -H 'Authorization: Tokacd9
c6ccb8133606d94ff8e61d99b477fd' -H 'Accept: application/json; charset=utf-8; indent=4'
 https://cloud.seafile.com/api2/repos/dae8cecc-2359-4d33-aa42-01b7846c4b32/dir/?p=/foo
```

Success

Response code 200 if everything is ok

Errors

- 403 if You do not have permission to rename a folder
- 400 if newname is not given
- 520 if Failed to rename directory (generic problem)

Notes

If the new name is the same of the old name no operation will be done.

Delete Directory

DELETE https://cloud.seafile.com/api2/repos/{repo-id}/dir/

- repo-id
- p

Sample request

```
curl -X DELETE -v  -H 'Authorization: Token f2210dacd3606d94ff8e61d99b477fd' -H 'Accep
t: application/json; charset=utf-8; indent=4' https://cloud.seafile.com/api2/repos/dae
8cecc-2359-4d33-aa42-01b7846c4b32/dir/?p=/foo
```

Sample response

```
...
< HTTP/1.0 200 OK
...
"success"
```

Success

Response code is 200(OK), and a string `"success"` is returned.

Errors

- 400 Path is missing or invalid(e.g. p=/)
- 520 Operation failed.

Note

This can also be used to delete file.

Download Directory

GET https://cloud.seafile.com/api2/repos/{repo-id}/dir/download/?p=/foo

- repo-id
- p

Sample request

```
curl -H 'Authorization: Token f2210dacd3606d94ff8e61d99b477fd' -H 'Accept: application
/json; charset=utf-8; indent=4' https://cloud.seafile.com/api2/repos/dae8cecc-2359-4d3
3-aa42-01b7846c4b32/dir/?p=/foo
```

Sample response

```
"https://cloud.seafile.com:8082/files/adee6094/foo"
```

Errors

- 400 Path is missing or invalid(e.g. p=/), or unable to download directory, size is too large
- 404 Repo(path) not found(exist)
- 520 Operation failed.

Share Directory

PUT https://cloud.seafile.com/api2/repos/{repo-id}/dir/shared_items/?p={path}

- repo-id
- path
- permission, `r` or `rw`
- share_type, `user` or `group`
- username, necessary if share_type is user
- group_id, necessary if share_type is group

Sample request for share folder to user

```
curl -X PUT -d "username=2@1.com&share_type=user&&perm=r" -H 'Authorization: Token ef1
2bf1e66a1aa797a1d6556fdc9ae84f1e9249f' -H 'Accept: application/json; charset=utf-8; in
dent=4' https://cloud.seafile.com/api2/repos/78c620ee-2989-4427-8eff-7748f4fbebc0/dir/
shared_items/?p=/q
```

Sample response for share folder to user

```
{"failed": [], "success": [{"user_info": {"nickname": "2", "name": "2@1.com"}, "share_
type": "user", "permission": "r"}]}
```

Sample request for share folder to group

```
curl -X PUT -d "group_id=772&share_type=group&&perm=rw" -H 'Authorization: Token ef12b
f1e66a1aa797a1d6556fdc9ae84f1e9249f' -H 'Accept: application/json; charset=utf-8; inde
nt=4' https://cloud.seafile.com/api2/repos/78c620ee-2989-4427-8eff-7748f4fbebc0/dir/sh
ared_items/?p=/q
```

Sample response for share folder to group

```
{"failed": [], "success": [{"group_info": {"id": 772, "name": "group-2"}, "share_type"
: "group", "permission": "r"}]}
```

Errors

- 400 share_type/permission/group_id invalid.
- 403 Permission denied.
- 404 Library/Folder/Group not found.
- 500 Failed to get sub repo.

Multiple Files / Directories

Copy

POST https://cloud.seafile.com/api2/repos/{repo_id}/fileops/copy/

Request parameters

- p: source folder path, defaults to `"/"`
- file_names: list of file/folder names to copy. Multiple file/folder names can be seperated by `:` .
- dst_repo: the destination repo id
- dst_dir: the destination folder in `dst_repo`

Sample request

```
curl -d "dst_repo=73ddb2b8-dda8-471b-b7a7-ca742b07483c&dst_dir=/&file_names=foo.c:bar.
c:dir1:dir2" -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd' https:
//cloud.seafile.com/api2/repos/c7436518-5f46-4296-97db-2fcba4c8c8db/fileops/copy/
```

Sample response

```
"success"
```

Errors

- 400 missing argument
- 403 You do not have permission to copy file
- 404 repo not found
- 502 failed to copy file

Move

POST https://cloud.seafile.com/api2/repos/{repo_id}/fileops/move/

Request parameters

- p: source folder path, defaults to `"/"`
- file_names: list of file/folder names to move. Multiple file/folder names can be seperated by `:` .
- dst_repo: the destination repo id
- dst_dir: the destination folder in `dst_repo`

Sample request

```
curl -d "dst_repo=73ddb2b8-dda8-471b-b7a7-ca742b07483c&dst_dir=/&file_names=foo.c:bar.
c:dir1:dir2" -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd' https:
//cloud.seafile.com/api2/repos/c7436518-5f46-4296-97db-2fcba4c8c8db/fileops/move/
```

Sample response

```
"success"
```

Errors

- 400 missing argument
- 403 You do not have permission to move file
- 404 repo not found
- 502 failed to move file

Delete

POST https://cloud.seafile.com/api2/repos/{repo_id}/fileops/delete/

Request parameters

- p: source folder path, defaults to `"/"`
- file_names: list of file/folder names to delete. Multiple file/folder names can be seperated by `:` .

Sample request

```
curl -d "file_names=foo.c:bar.c:dir1:dir2" -H 'Authorization: Token f2210dacd9c6ccb813
3606d94ff8e61d99b477fd' https://cloud.seafile.com/api2/repos/c7436518-5f46-4296-97db-2
fcba4c8c8db/fileops/delete/
```

Sample response

```
"success"
```

Errors

- 400 missing argument
- 403 You do not have permission to delete file
- 404 repo not found
- 502 failed to delete file

Avatar

Get User Avatar

GET https://cloud.seafile.com/api2/avatars/user/{user}/resized/{size}/

Request parameters

- user

- size

Sample request

```
curl -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd' "https://cloud
.seafile.com/api2/avatars/user/user@example.com/resized/80/
```

Sample response

```
{
    "url": "http://127.0.0.1:8000/media/avatars/default.png",
    "is_default": true,
    "mtime": 0
}
```

Get Group Avatar

GET https://cloud.seafile.com/api2/avatars/group/{group_id}/resized/{size}/

Request parameters

- group_id
- size

Sample request

```
curl -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd' "https://cloud
.seafile.com/api2/avatars/group/1/resized/80/
```

Sample response

```
{
    "url": "http://127.0.0.1:8000/media/avatars/groups/default.png",
    "is_default": true,
    "mtime": 0
}
```

Get File Activities

GET https://cloud.seafile.com/api2/events/

Request parameters

this api will only return first 15 records of activities. if want get more, pass `start` parameter

- start (default 0)

Sample request

```
curl -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd' "https://cloud
.seafile.com/api2/events/"
```

Sample response

```
 {"more_offset": 15, "events":[{"repo_id": "6f3d28a4-73ae-4d01-a727-26774379dcb9", "au
thor": "mysnowls@163.com", "nick": "lins05", "time": 1398078909, "etype": "repo-update
", "repo_name": "Downloads", "desc": "Added \"seafile-cli_3.0.2_i386.tar.gz\"."},{"rep
o_id": "6f3d28a4-73ae-4d01-a727-26774379dcb9", "author": "mysnowls@163.com", "nick": "
lins05", "time": 1398075540, "etype": "repo-update", "repo_name": "Downloads", "desc":
 "Added \"seafile-server_3.0.0_x86-64.tar.gz\"."}], "more": false}
```

Sample request for more activities

```
curl -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd' "https://cloud
.seafile.com/api2/events/?start=15"
```

Sample response for more activities

```
 {"more_offset": 30, "events":[{"repo_id": "6f3d28a4-73ae-4d01-a727-26774379dcb9", "au
thor": "mysnowls@163.com", "nick": "lins05", "time": 1398078909, "etype": "repo-update
", "repo_name": "Downloads", "desc": "Added \"seafile-cli_3.0.2_i386.tar.gz\"."},{"rep
o_id": "6f3d28a4-73ae-4d01-a727-26774379dcb9", "author": "mysnowls@163.com", "nick": "
lins05", "time": 1398075540, "etype": "repo-update", "repo_name": "Downloads", "desc":
 "Added \"seafile-server_3.0.0_x86-64.tar.gz\"."}], "more": false}
```

Get Thumbnail Image

GET https://cloud.seafile.com/api2/repos/{repo_id}/thumbnail/

Request parameters

- repo_id
- p
- size

Sample request

```
curl -H 'Authorization: Token 40f9a510a0629430865dc199a3880898ad2e48fc' https://cloud.
seafile.com/api2/repos/fbead5d0-4817-4446-92f3-7ac8e6a8e5f5/thumbnail/?p=/5.jpg\&size=
123 > thumbnail.png
```

Add Organization

This API is only used internally to create an organization account in seacloud.cc.

POST https://cloud.seafile.com/api2/organization/

Request parameters

- username
- password
- org_name
- prefix
- quota
- member_limit

Sample request

```
curl -v -X POST -d "username=example@example.com&password=example&org_name=example&pre
fix=example&quota=100&member_limit=10" -H "Authorization: Token ccdff90e4d1efe76b2b3d9
1c06b027a5cff189d4" -H 'Accept: application/json; indent=4' https://cloud.seafile.com/
api2/organization/
```

Sample response

```
"success"
```

Web API (For Seafile server v5.1.0+)

Seafile Web API

API Basics

All API calls must be authenticated with a valid Seafile API key.

```
curl -H 'Authorization: Token 24fd3c026886e3121b2ca630805ed425c272cb96' https://cloud.
seafile.com/api2/auth/ping/
```

The api key can be retrieved by the obtain auth api. See the Quick Start for details.

For each API, we provide `curl` examples to illustrate the usage. We also provide `python` and `javascript` examples, please refer to https://github.com/haiwen/webapi-examples for details.

Status Code

- 200: OK
- 201: CREATED
- 202: ACCEPTED
- 301: MOVED_PERMANENTLY
- 400: BAD_REQUEST
- 403: FORBIDDEN
- 404: NOT_FOUND
- 409: CONFLICT
- 429: TOO_MANY_REQUESTS
- 440: REPO_PASSWD_REQUIRED
- 441: REPO_PASSWD_MAGIC_REQUIRED

- 500: INTERNAL_SERVER_ERROR
- 520: OPERATION_FAILED

Quick Start

ping

```
curl https://cloud.seafile.com/api2/ping/

"pong"
```

obtain auth token

```
curl -d "username=username@example.com&password=123456" https://cloud.seafile.com/api2
/auth-token/

{"token": "24fd3c026886e3121b2ca630805ed425c272cb96"}
```

you should use `--data-urlencode` if you want to process some special characters properly.

```
curl --data-urlencode username=user+name@example.com -d password=123456 https://cloud.
seafile.com/api2/auth-token/

{"token":"265757b0a5aaf5d6b2e266d0c21791121ce6cdec"}
```

auth ping

```
curl -H 'Authorization: Token 24fd3c026886e3121b2ca630805ed425c272cb96' https://cloud.
seafile.com/api2/auth/ping/

"pong"
```

Account

Check Account Info

GET https://cloud.seafile.com/api2/account/info/

Sample request

```
curl -H "Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd" -H 'Accept: ap
plication/json; indent=4' https://cloud.seafile.com/api2/account/info/
```

Sample response

```
{
"usage": 26038531,
"total": 104857600,
"email": "user@example.com"
}
```

Errors

- 403 Invalid token

Get Server Information

GET https://cloud.seafile.com/api2/server-info

Note:

- No authentication required.
- Added in seafile community edition server `4.0.5` or pro edition server `4.0.3`

Sample request

```
curl https://cloud.seafile.com/api2/server-info/
```

Sample response

Sample response from a seafile community edition server:

```
{
    "version": "4.0.6",
    "features": [
    "seafile-basic",
    ]
}
```

Sample response from a seafile pro edition server:

```
{
    "version": "4.0.6",
    "features": [
    "seafile-basic",
    "seafile-pro",
    "office-preview",
    "file-search"
    ]
}
```

Starred Files

List starred files

GET https://cloud.seafile.com/api2/starredfiles/

Sample request

```
curl -H "Authorization: Token f2210dacd9c6ccb8133606d94ff8e6199b477fd" -H 'Accept: app
lication/json; indent=4' https://cloud.seafile.com/api2/starredfiles/
```

Sample response

```
[
{

    "repo": "99b758e6-91ab-4265-b705-925367374cf0",
    "mtime": 1355198150,
    "org": -1,
    "path": "/foo/bar.doc",
    "dir": false,
    "size": 0
},
{

    "repo": "99b758e6-91ab-4265-b705-925367374cf0",
    "mtime": 1353751237,
    "org": -1,
    "path": "/add_folder-blue.png",
    "dir": false,
    "size": 3170
}
]
```

Star A File

POST https://cloud.seafile.com/api2/starredfiles/

Request parameters

- repo_id (post)
- p (post)

Sample request

```
curl -v -d "repo_id=dae8cecc-2359-4d33-aa42-01b7846c4b32&p=/foo.md" -H 'Authorization:
 Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd' -H 'Accept: application/json; charset
=utf-8; indent=4' https://cloud.seafile.com/api2/starredfiles/
```

Sample response

```
...
< HTTP/1.0 201 CREATED
< Location: https://cloud.seafile.com/api2/starredfiles/
...
"success"
```

Success

Response code is 201(Created) and Location header provides url of starred file list.

Errors

- 400 `repo_id` or `p` is missing, or `p` is not valid file path(e.g. /foo/bar/).

Unstar A File

DELETE https://cloud.seafile.com/api2/starredfiles/

Request parameters

- repo_id
- p

Sample request

```
curl -X DELETE -v  -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd'
-H 'Accept: application/json; charset=utf-8; indent=4' 'https://cloud.seafile.com/api2
/starredfiles/?repo_id=dae8cecc-2359-4d33-aa42-01b7846c4b32&p=/foo.md'
```

Sample response

```
...
< HTTP/1.0 200 OK
...
"success"
```

Success

Response code is 200(OK), and a string named "success" is returned.

Errors

- 400 `repo_id` or `p` is missing, or `p` is not valid file path(e.g. /foo/bar/).

Group

List Groups

GET https://cloud.seafile.com/api2/groups/

Sample request

```
curl -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd' "https://cloud
.seafile.com/api2/groups/"
```

Sample response

```
{
    "replynum": 0,
    "groups": [
        {
            "ctime": 1398134171327948,
            "creator": "user@example.com",
            "msgnum": 0,
            "mtime": 1398231100,
            "id": 1,
            "name": "lian"
        },
        {
            "ctime": 1398236081042441,
            "creator": "user@example.com",
            "msgnum": 0,
            "mtime": 0,
            "id": 2,
            "name": "123"
        }
    ]
}
```

Add a Group

POST https://cloud.seafile.com/api/v2.1/groups/

Request parameters

- name (name of new group)

Sample request

```
curl -d "name=new_group_name" -H 'Authorization: Token 444d2bbf1fc78ffbeedc4704c9f41e3
2d926ac94' https://cloud.seafile.com/api/v2.1/groups/
```

Sample response

```
{
    "name": "new_group_name",
    "owner": "lian@lian.com",
    "created_at": "2015-12-17T10:29:57+0800",
    "admins": ["lian@lian.com"],
    "avatar_url": "https://cloud.seafile.com/media/avatars/groups/default.png",
    "id": 773
}
```

Get Info of a Group

GET https://cloud.seafile.com/api/v2.1/groups/772/

Request parameters

- avatar_size
- with_repos (0 or 1, if return library info of group. default 0 not return)

Sample request

```
curl -H 'Authorization: Token 444d2bbf1fc78ffbeedc4704c9f41e32d926ac94' https://cloud.
seafile.com/api/v2.1/groups/772/
```

Sample response

```
{
    "name": "rename_group_name",
    "owner": "lian@lian.com",
    "created_at": "2015-12-17T10:29:57+0800",
    "admins": ["lian@lian.com"],
    "avatar_url": "https://cloud.seafile.com/media/avatars/groups/default.png",
    "id": 772
}
```

Rename a Group

PUT https://cloud.seafile.com/api/v2.1/groups/772/

Request parameters

- name (name of new group)

Sample request

```
curl -X PUT -d "name=rename_group_name" -H 'Authorization: Token 444d2bbf1fc78ffbeedc4
704c9f41e32d926ac94' https://cloud.seafile.com/api/v2.1/groups/772/
```

Sample response

```
{
    "name": "rename_group_name",
    "owner": "lian@lian.com",
    "created_at": "2015-12-17T10:29:57+0800",
    "admins": ["lian@lian.com"],
    "avatar_url": "https://cloud.seafile.com/media/avatars/groups/default.png",
    "id": 772
}
```

Transfer a Group

PUT https://cloud.seafile.com/api/v2.1/groups/772/

Request parameters

- owner (new owner of this group, should be an email.)

Sample request

```
curl -X PUT -d "owner=new_owner@new_owner.com" -H 'Authorization: Token 444d2bbf1fc78f
fbeedc4704c9f41e32d926ac94' https://cloud.seafile.com/api/v2.1/groups/772/
```

Sample response

```
{
    "name": "rename_group_name",
    "owner": "new_owner@new_owner.com",
    "created_at": "2015-12-17T10:29:57+0800",
    "admins": ["lian@lian.com", "new_owner@new_owner.com"],
    "avatar_url": "https://cloud.seafile.com/media/avatars/groups/default.png",
    "id": 772
}
```

Delete a Group

DELETE https://cloud.seafile.com/api/v2.1/groups/772/

Sample request

```
curl -X DELETE -H 'Authorization: Token 444d2bbf1fc78ffbeedc4704c9f41e32d926ac94' http
s://cloud.seafile.com/api/v2.1/groups/772/
```

Sample response

```
{"success":true}
```

Quit Group

DELETE https://cloud.seafile.com/api/v2.1/groups/770/members/myself@email.com/

Sample request

```
curl -X DELETE -H 'Authorization: Token 444d2bbf1fc78ffbeedc4704c9f41e32d926ac94' http
s://cloud.seafile.com/api/v2.1/groups/770/members/myself@email.com/
```

Sample response

```
{"success":true}
```

Group Member

List All Group Members

GET https://cloud.seafile.com/api/v2.1/groups/770/members/

Request parameters

- avatar_size
- is_admin (`true` or `false` , if ONLY return admin members of group. default `false` return all members)

Sample request

```
curl -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd' "https://cloud
.seafile.com/api/v2.1/groups/770/members/"
```

Sample response

```
[
    {
        "login_id": "",
        "name": "nickname-of-lian",
        "avatar_url": "https://cloud.seafile.com/media/avatars/default.png",
        "is_admin": true,
        "contact_email": "lian_contact@email.com",
        "email": "lian@lian.com"
    },
    {
        "login_id": "",
        "name": "1",
        "avatar_url": "https://cloud.seafile.com/media/avatars/default.png",
        "is_admin": false,
        "contact_email": "1@1.com",
        "email": "1@1.com"
    }
]
```

Add a Group Member

POST https://cloud.seafile.com/api/v2.1/groups/770/members/

Request parameters

- email

Sample request

```
curl -d "email=new-member@email.com" -H 'Authorization: Token 444d2bbf1fc78ffbeedc4704
c9f41e32d926ac94' https://cloud.seafile.com/api/v2.1/groups/770/members/
```

Sample response

```
{
    "login_id": "",
    "name": "new-member",
    "avatar_url": "https://cloud.seafile.com/media/avatars/default.png",
    "is_admin": false,
    "contact_email": "new-member@email.com",
    "email": "new-member@email.com"
}
```

Bulk Add Group Members

POST https://cloud.seafile.com/api/v2.1/groups/770/members/bulk/

Request parameters

- emails

Sample request

```
curl -d "emails=new-member-1@email.com,new-member-2@email.com,new-member-3@email.com"
-H 'Authorization: Token 444d2bbf1fc78ffbeedc4704c9f41e32d926ac94' https://cloud.seafi
le.com/api/v2.1/groups/770/members/bulk/
```

Sample response

```
{
    "failed":[
        {
            "error_msg": "Invalid email",
            "email": "new-member-3@email.com"
        },
        {
            "error_msg": "Is already group member",
            "email": "new-member-4@email.com"
        }
    "success":[
        {
            "login_id": "",
            "name": "new-member-1",
            "avatar_url": "https://cloud.seafile.com/media/avatars/default.png",
            "is_admin": false,
            "contact_email": "new-member-1@email.com",
            "email": "new-member-1@email.com"
        },
        {
            "login_id": "",
            "name": "new-member-2",
            "avatar_url": "https://cloud.seafile.com/media/avatars/default.png",
            "is_admin": false,
            "contact_email": "new-member-2@email.com",
            "email": "new-member-2@email.com"
        }
    ]
}
```

Get Info of a Group Member

GET https://cloud.seafile.com/api/v2.1/groups/770/members/group-member@email.com/

Sample request

```
curl -H 'Authorization: Token 444d2bbf1fc78ffbeedc4704c9f41e32d926ac94' https://cloud.
seafile.com/api/v2.1/groups/770/members/group-member@email.com/
```

Request parameters

- avatar_size

Sample response

```
{
    "login_id": "",
    "name": "group-member",
    "avatar_url": "https://cloud.seafile.com/media/avatars/default.png",
    "is_admin": false,
    "contact_email": "group-member@email.com",
    "email": "group-member@email.com"
}
```

Set a Group Member Admin

PUT https://cloud.seafile.com/api/v2.1/groups/770/members/group-member@email.com/

Request parameters

- is_admin=true

Sample request

```
curl -X PUT -d "is_admin=true" -H 'Authorization: Token 444d2bbf1fc78ffbeedc4704c9f41e
32d926ac94' https://cloud.seafile.com/api/v2.1/groups/770/members/group-member@email.c
om/
```

Sample response

```
{
    "login_id": "",
    "name": "group-member",
    "avatar_url": "https://cloud.seafile.com/media/avatars/default.png",
    "is_admin": true,
    "contact_email": "group-member@email.com",
    "email": "group-member@email.com"
}
```

Unset a Group Member Admin

PUT https://cloud.seafile.com/api/v2.1/groups/770/members/group-member@email.com/

Request parameters

- is_admin=false

Sample request

```
curl -X PUT -d "is_admin=false" -H 'Authorization: Token 444d2bbf1fc78ffbeedc4704c9f41
e32d926ac94' https://cloud.seafile.com/api/v2.1/groups/770/members/group-member@email.
com/
```

Sample response

```
{
    "login_id": "",
    "name": "group-member",
    "avatar_url": "https://cloud.seafile.com/media/avatars/default.png",
    "is_admin": false,
    "contact_email": "group-member@email.com",
    "email": "group-member@email.com"
}
```

Delete a Group Member

DELETE https://cloud.seafile.com/api/v2.1/groups/770/members/group-member@email.com/

Sample request

```
curl -X DELETE -H 'Authorization: Token 444d2bbf1fc78ffbeedc4704c9f41e32d926ac94' http
s://cloud.seafile.com/api/v2.1/groups/770/members/group-member@email.com/
```

Sample response

```
{"success":true}
```

Group Message

Get Group Messages

GET https://cloud.seafile.com/api2/groups/{group_id}/discussions/

Request parameters

- group_id
- page (default 1)
- per_page (default 20)
- avatar_size (default 80)

Sample request

```
curl -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd' "https://cloud
.seafile.com/api2/groups/772/discussions/"
```

Sample response

```
{'current_page': 1,
 'msgs': [{'avatar_url': 'https://cloud.seafile.com/media/avatars/default.png',
          'content': u'test',
          'created_at': '2016-07-11T09:18:20+08:00',
          'group_id': 772,
          'id': 1,
          'user_email': u'lian@lian.com',
          'user_login_id': '',
          'user_name': u'name-of-lian'}],
 'page_num': 1}
```

Send A Group Message

POST https://cloud.seafile.com/api2/groups/{group_id}/discussions/

Request parameters

- group_id
- content
- avatar_size (default 80)

Sample request

```
curl -d "content=this is another test" -H 'Authorization: Token f2210dacd9c6ccb8133606
d94ff8e61d99b477fd' "https://cloud.seafile.com/api2/groups/772/discussions/"
```

Sample response

```
{'avatar_url': 'https://cloud.seafile.com/media/avatars/default.png',
 'content': u'this is another test',
 'created_at': '2016-07-11T09:27:49+08:00',
 'group_id': 772,
 'id': 3,
 'user_email': u'lian@lian.com',
 'user_login_id': '',
 'user_name': u'name-of-lian'}
```

Delete A Group Message

DELETE https://cloud.seafile.com/api2/groups/772/discussions/3/

Request parameters

- group_id
- discuss_id

Sample request

```
curl -v -X DELETE -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd' "
https://cloud.seafile.com/api2/groups/772/discussions/3/"
```

sample response

```
...
< http/1.0 204 no content
...
```

Errors

- 400 Discussion id not found.
- 403 Permission denied.

Share

File Share Link

List all Share Links

This api will list all folder/file download share links in all libraries created by user.

GET https://cloud.seafile.com/api/v2.1/share-links/

Sample request

```
curl -H 'Authorization: Token 0eb24ce5db35a31f70171eca2f760f03f59fa09a' -H 'Accept: ap
plication/json; charset=utf-8; indent=4' "https://cloud.seafile.com/api/v2.1/share-lin
ks/"
```

Sample response

```
[
    {
        "username": "lian@lian.com",
        "repo_id": "c474a093-19dc-4ddf-b0b0-72b33214ba33",
        "ctime": "2017-04-01T02:35:57+00:00",
        "expire_date": "",
        "token": "6afa667ff2c248378b70",
        "view_cnt": 0,
        "link": "https://cloud.seafile.com/d/6afa667ff2c248378b70/",
        "obj_name": "/",
        "path": "/",
        "is_dir": true,
        "is_expired": false,
        "repo_name": "seacloud.cc.124"
    },
    {
        "username": "lian@lian.com",
        "repo_id": "104f6537-b3a5-4d42-b8b5-8e47e494e4cf",
        "ctime": "2017-04-01T02:35:29+00:00",
        "expire_date": "",
        "token": "0c4eb0cb104a43caaeef",
        "view_cnt": 0,
        "link": "https://cloud.seafile.com/d/0c4eb0cb104a43caaeef/",
        "obj_name": "folder",
        "path": "/folder/",
        "is_dir": true,
        "is_expired": false,
        "repo_name": "for-test-web-api"
    },
    {
        "username": "lian@lian.com",
        "repo_id": "104f6537-b3a5-4d42-b8b5-8e47e494e4cf",
        "ctime": "2017-04-01T02:35:35+00:00",
        "expire_date": "",
        "token": "8c05a00c44db4764b3a5",
        "view_cnt": 0,
        "link": "https://cloud.seafile.com/f/8c05a00c44db4764b3a5/",
        "obj_name": "tmp.md",
        "path": "/tmp.md",
        "is_dir": false,
        "is_expired": false,
        "repo_name": "for-test-web-api"
    }
]
```

Errors

- 403 Permission denied.
- 500 Internal Server Error

List Share Links of a Library

This api will list all folder/file download share links in a specific library.

GET https://cloud.seafile.com/api/v2.1/share-links/?repo_id={repo_id}

Request parameters

- repo-id

Sample request

```
curl -H 'Authorization: Token 0eb24ce5db35a31f70171eca2f760f03f59fa09a' -H 'Accept: ap
plication/json; charset=utf-8; indent=4' "https://cloud.seafile.com/api/v2.1/share-lin
ks/?repo_id=104f6537-b3a5-4d42-b8b5-8e47e494e4cf"
```

Sample response

```
[
    {
        "username": "lian@lian.com",
        "repo_id": "104f6537-b3a5-4d42-b8b5-8e47e494e4cf",
        "ctime": "2017-04-01T02:35:29+00:00",
        "expire_date": "",
        "token": "0c4eb0cb104a43caaeef",
        "view_cnt": 0,
        "link": "https://cloud.seafile.com/d/0c4eb0cb104a43caaeef/",
        "obj_name": "folder",
        "path": "/folder/",
        "is_dir": true,
        "is_expired": false,
        "repo_name": "for-test-web-api"
    },
    {
        "username": "lian@lian.com",
        "repo_id": "104f6537-b3a5-4d42-b8b5-8e47e494e4cf",
        "ctime": "2017-04-01T02:35:35+00:00",
        "expire_date": "",
        "token": "8c05a00c44db4764b3a5",
        "view_cnt": 0,
        "link": "https://cloud.seafile.com/f/8c05a00c44db4764b3a5/",
        "obj_name": "tmp.md",
        "path": "/tmp.md",
        "is_dir": false,
        "is_expired": false,
        "repo_name": "for-test-web-api"
    }
]
```

Errors

- 403 Permission denied.
- 404 library not found.
- 500 Internal Server Error

List Share Link of a Folder(File)

This api will list download share link info of a specific folder/file.

GET https://cloud.seafile.com/api/v2.1/share-links/?repo_id={rpeo_id}&path={path}

Request parameters

- repo-id
- path, could be path of a foler or a file.

Sample request

Get folder download share link.

```
curl -H 'Authorization: Token 0eb24ce5db35a31f70171eca2f760f03f59fa09a' -H 'Accept: ap
plication/json; charset=utf-8; indent=4' "https://cloud.seafile.com/api/v2.1/share-lin
ks/?repo_id=104f6537-b3a5-4d42-b8b5-8e47e494e4cf&path=/folder/"
```

Sample response

```
[
    {
        "username": "lian@lian.com",
        "repo_id": "104f6537-b3a5-4d42-b8b5-8e47e494e4cf",
        "ctime": "2017-04-01T02:35:29+00:00",
        "expire_date": "",
        "token": "0c4eb0cb104a43caaeef",
        "view_cnt": 0,
        "link": "https://cloud.seafile.com/d/0c4eb0cb104a43caaeef/",
        "obj_name": "folder",
        "path": "/folder/",
        "is_dir": true,
        "is_expired": false,
        "repo_name": "for-test-web-api"
    }
]
```

or a empty list `[]` if this folder has no download share link.

Get file download share link.

```
curl -H 'Authorization: Token 0eb24ce5db35a31f70171eca2f760f03f59fa09a' -H 'Accept: ap
plication/json; charset=utf-8; indent=4' "https://cloud.seafile.com/api/v2.1/share-lin
ks/?repo_id=104f6537-b3a5-4d42-b8b5-8e47e494e4cf&path=/tmp.md"
```

Sample response

```
[
    {
        "username": "lian@lian.com",
        "repo_id": "104f6537-b3a5-4d42-b8b5-8e47e494e4cf",
        "ctime": "2017-04-01T02:35:35+00:00",
        "expire_date": "",
        "token": "8c05a00c44db4764b3a5",
        "view_cnt": 0,
        "link": "https://cloud.seafile.com/f/8c05a00c44db4764b3a5/",
        "obj_name": "tmp.md",
        "path": "/tmp.md",
        "is_dir": false,
        "is_expired": false,
        "repo_name": "for-test-web-api"
    }
]
```

or a empty list `[]` if this file has no download share link.

Errors

- 403 Permission denied.
- 404 folder/library not found.
- 500 Internal Server Error

Create Share Link

POST https://cloud.seafile.com/api/v2.1/share-links/

Request parameters

- repo-id
- path (file/folder path)
- password (not necessary)
- expire_days (not necessary)

Sample request

Create download link for file

```
curl -d "path=/foo.md&repo_id=62ca6cf9-dab6-47e5-badc-bab13d9220ce" -H 'Authorization:
 Token ef12bf1e66a1aa797a1d6556fdc9ae84f1e9249f' -H 'Accept: application/json; indent=
4' https://cloud.seafile.com/api/v2.1/share-links/
```

Create download link for directory with password and expire date

```
curl -d "path=/bar/&repo_id=62ca6cf9-dab6-47e5-badc-bab13d9220ce&password=password&exp
ire_days=6" -H 'Authorization: Token ef12bf1e66a1aa797a1d6556fdc9ae84f1e9249f' -H 'Acc
ept: application/json; indent=4' https://cloud.seafile.com/api/v2.1/share-links/
```

Sample response

```
{
    "username": "lian@lian.com",
    "view_cnt": 0,
    "ctime": "2016-03-04T04:06:35.477",
    "token": "409f5aa54a",
    "repo_id": "62ca6cf9-dab6-47e5-badc-bab13d9220ce",
    "link": "https://cloud.seafile.com/f/409f5aa54a/",
    "expire_date": null,
    "path": "/foo.md",
    "is_expired": false
}
```

```
{
    "username": "lian@lian.com",
    "view_cnt": 0,
    "ctime": "2016-03-04T04:12:48.959",
    "token": "db1a50e686",
    "repo_id": "62ca6cf9-dab6-47e5-badc-bab13d9220ce",
    "link": "https://cloud.seafile.com/d/db1a50e686/",
    "expire_date": null,
    "path": "/bar/",
    "is_expired": false
}
```

Errors

- 400 path/repo_id invalid
- 403 Permission denied.
- 404 file/folder/library not found.
- 500 Internal Server Error

Delete Share Link

DELETE https://cloud.seafile.com/api/v2.1/share-links/{token}/

Sample request

```
curl -X DELETE -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd' "htt
ps://cloud.seafile.com/api/v2.1/share-links/0ae587a7d1/"
```

Sample response

```
{"success":true}
```

Send Share Link Email

POST https://cloud.seafile.com/api2/send-share-link/

Request parameters

- token
- email
- extra_msg (not necessary)

Sample request

```
curl -d "email=sample@eamil.com,invalid-email&token=4cbd625c5e" -H 'Authorization: Tok
en ef12bf1e66a1aa797a1d6556fdc9ae84f1e9249f' -H 'Accept: application/json; indent=4' h
ttps://cloud.seafile.com/api2/send-share-link/
```

Sample response

```
{
    "failed": [
        {
            "email": "invalid-email",
            "error_msg": "email invalid."
        }
    ],
    "success": [
        "sample@eamil.com"
    ]
}
```

Errors

- 400 token/repo_id invalid
- 403 Permission denied.
- 403 Sending shared link failed. Email service is not properly configured, please contact administrator.
- 404 token/library not found

List Direntry in Dir Download Link

GET https://cloud.seafile.com/api2/d/{token}/dir/

Request parameters

- token (upload link token)
- p (sub folder path)
- password (if link is encrypted)

Sample request

```
curl -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd' "https://cloud
.seafile.com/api2/d/3af7c46595/dir/?p=/subfolder/"
```

Sample response

```
[{"mtime": 1436846750, "type": "dir", "name": "sadof", "id": "1806dbdb700b7bcd49e62751
07c7ccf7b3ea1776"}, {"id": "bdb06f6de972c42893fda590ac954988b562429c", "mtime": 143643
1020, "type": "file", "name": "test.mdert", "size": 20}]
```

Upload Link

List Upload Links

GET https://cloud.seafile.com/api/v2.1/upload-links/

Sample request

```
curl -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd' "https://cloud
.seafile.com/api/v2.1/upload-links/"
```

Sample response

```
[{"username":"lian@lian.com","repo_id":"62ca6cf9-dab6-47e5-badc-bab13d9220ce","ctime":
"2016-03-03T15:26:15.223","token":"9a5d5c8391","link":"https://cloud.seafile.com/u/d/9
a5d5c8391/","path":"/"},{"username":"lian@lian.com","repo_id":"78c620ee-2989-4427-8eff
-7748f4fbebc0","ctime":"2016-03-04T05:37:17.968","token":"d17d87ea4d","link":"https://
cloud.seafile.com/u/d/d17d87ea4d/","path":"/yutong/"}]
```

Create Upload Link

POST https://cloud.seafile.com/api/v2.1/upload-links/

Request parameters

- repo-id
- path (file/folder path)
- password (not necessary)

Sample request

Create upload link for directory with password

```
curl -d "path=/bar/&repo_id=afc3b694-7d4c-4b8a-86a4-89c9f3261b12&password=password" -H
 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd' -H 'Accept: applicati
on/json; indent=4' https://cloud.seafile.com/api/v2.1/upload-links/
```

Sample response

```
{
    "username": "lian@lian.com",
    "repo_id": "62ca6cf9-dab6-47e5-badc-bab13d9220ce",
    "ctime": "2016-03-04T05:51:34.022",
    "token": "dce40e8594",
    "link": "https://cloud.seafile.com/u/d/dce40e8594/",
    "path": "/bar/"
}
```

Errors

- 400 path/repo_id invalid
- 403 Permission denied.
- 500 Internal Server Error

Delete Upload Link

DELETE https://cloud.seafile.com/api/v2.1/upload-links/{token}/

Sample request

```
curl -X DELETE -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd' "htt
ps://cloud.seafile.com/api/v2.1/upload-links/0ae587a7d1/"
```

Sample response

```
{"success":true}
```

Send Upload Link Email

POST https://cloud.seafile.com/api2/send-upload-link/

Request parameters

- token
- email
- extra_msg (not necessary)

Sample request

```
curl -d "email=sample@eamil.com,invalid-email&token=4cbd625c5e" -H 'Authorization: Tok
en ef12bf1e66a1aa797a1d6556fdc9ae84f1e9249f' -H 'Accept: application/json; indent=4' h
ttps://cloud.seafile.com/api2/send-upload-link/
```

Sample response

```
{
    "failed": [
        {
            "email": "invalid-email",
            "error_msg": "email invalid."
        }
    ],
    "success": [
        "sample@eamil.com"
    ]
}
```

- 400 token/repo_id invalid
- 403 Permission denied.
- 403 Sending shared link failed. Email service is not properly configured, please contact administrator.
- 404 token/library not found

Shared Libraries

List User Shared Libraries

GET https://cloud.seafile.com/api2/repos/7460f7ac-a0ff-4585-8906-bb5a57d2e118/dir/shared_items/?p=/&share_type=user

Request parameters

- p, `/` means the **root** folder, which is equivalent to the library.
- share_type, `user`

Sample request

```
curl -v -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd' -H 'Accept:
 application/json; indent=4' https://cloud.seafile.com/api2/repos/7460f7ac-a0ff-4585-8
906-bb5a57d2e118/dir/shared_items/?p=/&share_type=user
```

Sample response

```
[
    {"user_info": {"nickname": "5", "name": "5@1.com"}, "share_type": "user", "permiss
ion": "r"},
    {"user_info": {"nickname": "name of 4", "name": "4@1.com"}, "share_type": "user",
"permission": "r"}
]
```

Errors

- 400 share_type invalid.
- 403 Permission denied.
- 404 Library not found.

List Group Shared Libraries

GET https://cloud.seafile.com/api2/repos/7460f7ac-a0ff-4585-8906-bb5a57d2e118/dir/shared_items/?p=/&share_type=group

Request parameters

- p, `/` means the **root** folder, which is equivalent to the library.
- share_type, `group`

Sample request

```
curl -v -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd' -H 'Accept:
 application/json; indent=4' https://cloud.seafile.com/api2/repos/7460f7ac-a0ff-4585-8
906-bb5a57d2e118/dir/shared_items/?p=/&share_type=group
```

Sample response

```
[
    {"group_info": {"id": 65, "name": "group"}, "share_type": "group", "permission": "
r"},
    {"group_info": {"id": 395, "name": "lsd"}, "share_type": "group", "permission": "r
w"}
]
```

Errors

- 400 share_type invalid.
- 403 Permission denied.
- 404 Library not found.

List Be Shared Libraries

GET https://cloud.seafile.com/api2/beshared-repos/

Sample request

```
curl -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd' "https://cloud
.seafile.com/api2/beshared-repos/"
```

Sample response

```
"[{"user": "user@example.com", "repo_id": "989e3952-9d6f-4427-ab16-4bf9b53212eb", "sha
re_type": "personal", "permission": "rw", "encrypted": false, "repo_desc": "lib shared
 to imwhatiam", "enc_version": false, "last_modified": 1398218747, "is_virtual": false
, "group_id": 0, "repo_name": "lib shared to imwhatiam"}]"
```

Delete Be Shared Library

DELETE https://cloud.seafile.com/api2/beshared-repos/{repo_id}/?
share_type=personal&from=from_user@name.com

Sample request

```
curl -X DELETE -H "Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd" -H '
Accept: application/json; indent=4' https://cloud.seafile.com/api2/beshared-repos/{rep
o_id}/?share_type=personal&from=from_user@name.com
```

Sample response

```
{"success": true}
```

Errors

- 400 Invalid argument
- 400 Library does not exist

Share a Library to User

PUT https://cloud.seafile.com/api2/repos/{repo_id}/dir/shared_items/?p=/

Request parameters

- p, `/` means the **root** folder, which is equivalent to the library.
- share_type, `user`
- username, a email string or a list contains multi emails
- permission, default `r`

Sample request

```
curl -X PUT -d "share_type=user&username=4@1.com&username=5@1.com&username=invalid@ema
il.com&permission=r" -H 'Authorization: Token 0eb24ce5db35a31f70171eca2f760f03f59fa09a
' -H 'Accept: application/json; charset=utf-8; indent=4' https://cloud.seafile.com/api
2/repos/7460f7ac-a0ff-4585-8906-bb5a57d2e118/dir/shared_items/?p=/
```

Sample response

```
{
    "failed": [
        {"email": "invalid@email.com", "error_msg": "User invalid@email.com not found.
"}
    ],
    "success": [
        {"user_info": {"nickname": "name of 4", "name": "4@1.com"}, "share_type": "use
r", "permission": "r"},
        {"user_info": {"nickname": "5", "name": "5@1.com"}, "share_type": "user", "per
mission": "r"}
    ]
}
```

Errors

- 400 permission invalid.
- 400 share_type invalid.
- 403 Permission denied.
- 404 Library not found.

Unshare a Library from User

DELETE https://cloud.seafile.com/api2/repos/{repo_id}/dir/shared_items/?p=/&share_type=user&username=5@1.com

Request parameters

- p, `/` means the **root** folder, which is equivalent to the library.
- share_type, `user`
- username, a email string

Sample request

```
curl -X DELETE -H 'Authorization: Token 0eb24ce5db35a31f70171eca2f760f03f59fa09a' -H '
Accept: application/json; charset=utf-8; indent=4' "https://cloud.seafile.com/api2/rep
os/7460f7ac-a0ff-4585-8906-bb5a57d2e118/dir/shared_items/?p=/&share_type=user&username
=5@1.com"
```

Sample response

```
{"success": true}
```

Errors

- 400 share_type invalid.
- 400 email invalid.
- 403 Permission denied.

- 404 Library not found.

Update Permission of User Shared Library

POST https://cloud.seafile.com/api2/repos/{repo_id}/dir/shared_items/?p=/&share_type=user&username=5@1.com

Request parameters

- p, `/` means the **root** folder, which is equivalent to the library.
- share_type, `user`
- username, a email string
- permisson, `r` or `rw`

Sample request

```
curl -d "permission=r" -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477
fd' -H 'Accept: application/json; indent=4' "https://cloud.seafile.com/api2/repos/2def
fbac-d7be-4ace-b406-efb799083ee9/dir/shared_items/?p=/&share_type=user&username=5@1.co
m"
```

Sample response

```
{"success": true}
```

Errors

- 400 share_type invalid.
- 403 permission invalid.
- 403 Permission denied.
- 404 Library not found.
- 404 Folder not found.

Share a Library to Group

PUT https://cloud.seafile.com/api2/repos/{repo_id}/dir/shared_items/?p=/

Request parameters

- p, `/` means the **root** folder, which is equivalent to the library.
- share_type, `group`
- group_id , an integer or a list contains multi integers
- permission, default `r`

Sample request

```
curl -X PUT -d "share_type=group&group_id=65&group_id=395&group_id=invalid_group_id&gr
oup_id=111&permission=rw" -H 'Authorization: Token 0eb24ce5db35a31f70171eca2f760f03f59
fa09a' -H 'Accept: application/json; charset=utf-8; indent=4' https://cloud.seafile.co
m/api2/repos/7460f7ac-a0ff-4585-8906-bb5a57d2e118/dir/shared_items/?p=/
```

Sample response

```
{
    "failed": [],
    "success": [
        {"group_info": {"id": 65, "name": "group"}, "share_type": "group", "permission
": "rw"},
        {"group_info": {"id": 395, "name": "lsd"}, "share_type": "group", "permission"
: "rw"}
    ]
}
```

Errors

- 400 permission invalid.
- 400 group_id invalid.
- 400 share_type invalid.
- 403 Permission denied.
- 404 Library not found.

Unshare a Library from Group

DELETE https://cloud.seafile.com/api2/repos/{repo_id}/dir/shared_items/?
p=/&share_type=group&group=65

Request parameters

- p, `/` means the **root** folder, which is equivalent to the library.
- share_type, `group`
- group_id , an integer

Sample request

```
curl -X DELETE -H 'Authorization: Token 0eb24ce5db35a31f70171eca2f760f03f59fa09a' -H '
Accept: application/json; charset=utf-8; indent=4' "https://cloud.seafile.com/api2/rep
os/7460f7ac-a0ff-4585-8906-bb5a57d2e118/dir/shared_items/?p=/&share_type=group&group_i
d=65"
```

Sample response

```
{"success": true}
```

Errors

- 400 share_type invalid.
- 400 group_id invalid.
- 403 Permission denied.
- 404 Library not found.

Update Permission of Group Shared Library

POST https://cloud.seafile.com/api2/repos/{repo_id}/dir/shared_items/?
p=/&share_type=group&group_id=65

Request parameters

- p, `/` means the **root** folder, which is equivalent to the library.
- share_type, `group`
- group_id , an integer
- permisson, `r` or `rw`

Sample request

```
curl -d "permission=r" -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477
fd' -H 'Accept: application/json; indent=4' "https://cloud.seafile.com/api2/repos/2def
fbac-d7be-4ace-b406-efb799083ee9/dir/shared_items/?p=/&share_type=group&group_id=65"
```

Sample response

```
{"success": true}
```

Errors

- 400 share_type invalid.
- 403 permission invalid.
- 403 Permission denied.
- 404 Library not found.

Batch Share Libraries to User

POST https://cloud.seafile.com/api/v2.1/repos/batch/

Request parameters

- operation, `share`
- share_type, `user`
- username, email of a user
- permission, default is `rw`

- repo_id

Sample request

```
curl -d "operation=share&share_type=user&username=2@org.com&repo_id=b6cfa05d-07af-422b
-924e-45202dc1cbb5&repo_id=48aa475d-deb0-40f0-ab9b-22ec84989a58" -H 'Authorization: To
ken 40c89d06a2beeec672d091156de4cc163c6aa31a' -H 'Accept: application/json; charset=ut
f-8; indent=4' https://cloud.seafile.com/api/v2.1/repos/batch/
```

Sample response

```
{
    "failed": [
        {"repo_id": "3761ade3-100b-4c3b-9508-79b3a510e6f6", "error_msg": "This item ha
s been shared to 1@1.com."}
    ],
    "success": [
        {"username": "1@1.com", "repo_id": "f820bd12-0511-4542-b14b-3e48d8efc294", "pe
rmission": "rw"}
    ]
}
```

Errors

- 400 permission invalid.
- 400 share_type invalid.
- 403 Permission denied.
- 404 Library not found.
- 404 User not found.
- 500 Internal Server Error

Batch Share Libraries to Group

POST https://cloud.seafile.com/api/v2.1/repos/batch/

Request parameters

- operation, `share`
- share_type, `group`
- group_id
- permission, default is `rw`
- repo_id

Sample request

```
curl -d "operation=share&share_type=group&group_id=540&repo_id=b6cfa05d-07af-422b-924e
-45202dc1cbb5&repo_id=48aa475d-deb0-40f0-ab9b-22ec84989a58" -H 'Authorization: Token 4
0c89d06a2beeec672d091156de4cc163c6aa31a' -H 'Accept: application/json; charset=utf-8;
indent=4' https://cloud.seafile.com/api/v2.1/repos/batch/
```

Sample response

```
{
    "failed": [
        {"repo_id": "f820bd12-0511-4542-b14b-3e48d8efc294", "error_msg": "This item ha
s been shared to group-of-lian."}
    ],
    "success": [
        {"permission": "rw", "repo_id": "3761ade3-100b-4c3b-9508-79b3a510e6f6", "group
_id": 65, "group_name": "group-of-lian"}
    ]
}
```

Errors

- 400 permission invalid.
- 400 share_type invalid.
- 403 Permission denied.
- 404 Library not found.
- 404 Group not found.
- 500 Internal Server Error

Shared Folders

Share A Folder

PUT https://cloud.seafile.com/api2/repos/{repo-id}/dir/shared_items/?p={path}

- repo-id
- path
- permission, `r` or `rw`
- share_type, `user` or `group`
- username, necessary if share_type is user
- group_id, necessary if share_type is group

Sample request for share folder to user

```
curl -X PUT -d "username=2@1.com&share_type=user&&perm=r" -H 'Authorization: Token ef1
2bf1e66a1aa797a1d6556fdc9ae84f1e9249f' -H 'Accept: application/json; charset=utf-8; in
dent=4' https://cloud.seafile.com/api2/repos/78c620ee-2989-4427-8eff-7748f4fbebc0/dir/
shared_items/?p=/q
```

Sample response for share folder to user

```
{"failed": [], "success": [{"user_info": {"nickname": "2", "name": "2@1.com"}, "share_
type": "user", "permission": "r"}]}
```

Sample request for share folder to group

```
curl -X PUT -d "group_id=772&share_type=group&&perm=rw" -H 'Authorization: Token ef12b
f1e66a1aa797a1d6556fdc9ae84f1e9249f' -H 'Accept: application/json; charset=utf-8; inde
nt=4' https://cloud.seafile.com/api2/repos/78c620ee-2989-4427-8eff-7748f4fbebc0/dir/sh
ared_items/?p=/q
```

Sample response for share folder to group

```
{"failed": [], "success": [{"group_info": {"id": 772, "name": "group-2"}, "share_type"
: "group", "permission": "r"}]}
```

Errors

- 400 share_type/permission/group_id invalid.
- 403 Permission denied.
- 404 Library/Folder/Group not found.
- 500 Failed to get sub repo.

List Shared Folders

GET https://cloud.seafile.com/api/v2.1/shared-folders/

Sample request

```
curl -v -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd' -H 'Accept:
 application/json; indent=4' https://cloud.seafile.com/api/v2.1/shared-folders/
```

Sample response

```
[
    {
        "share_permission": "rw",
        "repo_id": "2deffbac-d7be-4ace-b406-efb799083ee9",
        "share_type": "personal",
        "folder_name": "asd",
        "path": "/asd",
        "user_name": "1",
        "contact_email": "contact@email.com",
        "user_email": "1@1.com"
    },
    {
        "share_permission": "r",
        "repo_id": "2deffbac-d7be-4ace-b406-efb799083ee9",
        "share_type": "group",
        "group_name": "test_group",
        "folder_name": "asd",
        "path": "/asd",
        "group_id": 1448
    }
]
```

Errors

- 500 Internal Server Error

Update Shared Folder Permission

POST https://cloud.seafile.com/api2/repos/2deffbac-d7be-4ace-b406-efb799083ee9/dir/shared_items/?p=/asd&share_type=user&username=1@1.com

Sample request

```
curl -d "permission=r" -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477
fd' -H 'Accept: application/json; indent=4' https://cloud.seafile.com/api2/repos/2deff
bac-d7be-4ace-b406-efb799083ee9/dir/shared_items/?p=/asd&share_type=user&username=1@1.
com
```

Sample response

```
{"success":true}
```

Errors

- 400 permission invalid.
- 400 Email invalid.
- 403 Permission denied.
- 404 Library not found.
- 404 Folder not found.

- 500 Internal Server Error

Unshare A Folder

POST https://cloud.seafile.com/api2/repos/2deffbac-d7be-4ace-b406-efb799083ee9/dir/shared_items/?p=/asd&share_type=group&group_id=1448

Sample request

```
curl -X DELETE -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd' -H '
Accept: application/json; indent=4' https://cloud.seafile.com/api2/repos/2deffbac-d7be
-4ace-b406-efb799083ee9/dir/shared_items/?p=/asd&share_type=group&group_id=1448
```

Sample response

```
{"success":true}
```

Errors

- 400 Email invalid.
- 403 Permission denied.
- 404 Library not found.
- 404 Folder not found.
- 500 Internal Server Error

Folder Permission

User Folder Permission

Get User Folder Permission

GET http://192.168.1.124:8000/api2/repos/{repo_id}/user-folder-perm/?folder_path=/123

Request parameters

- repo_id
- folder_path

Sample request

```
curl -H 'Authorization: Token cbd7705c06846425ed5c46ae0313d5b098d24154' -H 'Accept: ap
plication/json; charset=utf-8; indent=4' "http://192.168.1.124:8000/api2/repos/bdf816e
6-aba8-468c-962f-77c2fcfd1d1c/user-folder-perm/?folder_path=/123"
```

Sample response

```
[
    {
        "repo_id": "bdf816e6-aba8-468c-962f-77c2fcfd1d1c",
        "folder_path": "/123",
        "permission": "r",
        "folder_name": "123",
        "user_name": "1",
        "user_email": "1@1.com"
    },
    {
        "repo_id": "bdf816e6-aba8-468c-962f-77c2fcfd1d1c",
        "folder_path": "/123",
        "permission": "rw",
        "folder_name": "123",
        "user_name": "2",
        "user_email": "2@1.com"
    }
]
```

Errors

- 403 Permission denied.
- 404 Library not found.

Set User Folder Permission

POST http://192.168.1.124:8000/api2/repos/{repo_id}/user-folder-perm/

Request parameters

- repo_id
- folder_path
- user_email
- permission, `r` or `rw`

Sample request

```
curl -d "folder_path=/123&permission=rw&user_email=3@1.com&user_email=2@1.com" -H 'Aut
horization: Token cbd7705c06846425ed5c46ae0313d5b098d24154' -H 'Accept: application/js
on; charset=utf-8; indent=4' "http://192.168.1.124:8000/api2/repos/bdf816e6-aba8-468c-
962f-77c2fcfd1d1c/user-folder-perm/"
```

Sample response

```
{
    "failed": [
        {
            "error_msg": "Permission already exists.",
            "user_email": "2@1.com"
        }
    ],
    "success": [
        {
            "repo_id": "bdf816e6-aba8-468c-962f-77c2fcfd1d1c",
            "folder_path": "/123",
            "permission": "rw",
            "folder_name": "123",
            "user_name": "3",
            "user_email": "3@1.com"
        }
    ]
}
```

Errors

- 400 folder_path invalid.
- 400 permission invalid.
- 403 Permission denied.
- 404 Library not found.
- 404 Folder not found.

Modify User Folder Permission

PUT http://192.168.1.124:8000/api2/repos/{repo_id}/user-folder-perm/

Request parameters

- repo_id
- folder_path
- user_email
- permission, `r` or `rw`

Sample request

```
curl -X PUT -d "folder_path=/123&permission=r&user_email=3@1.com" -H 'Authorization: T
oken cbd7705c06846425ed5c46ae0313d5b098d24154' -H 'Accept: application/json; charset=u
tf-8; indent=4' "http://192.168.1.124:8000/api2/repos/bdf816e6-aba8-468c-962f-77c2fcfd
1d1c/user-folder-perm/"
```

Sample response

```
{
    "repo_id": "bdf816e6-aba8-468c-962f-77c2fcfd1d1c",
    "folder_path": "/123",
    "permission": "r",
    "folder_name": "123",
    "user_name": "3",
    "user_email": "3@1.com"
}
```

Errors

- 400 folder_path invalid.
- 400 permission invalid.
- 400 user_email invalid.
- 403 Permission denied.
- 404 Library not found.
- 404 Folder not found.
- 404 User not found.
- 404 Folder permission not found.
- 500 Internal Server Error

Delete User Folder Permission

DELETE http://192.168.1.124:8000/api2/repos/{repo_id}/user-folder-perm/

Request parameters

- repo_id
- folder_path
- user_email

Sample request

```
curl -X DELETE -d "folder_path=/123&user_email=3@1.com" -H 'Authorization: Token cbd77
05c06846425ed5c46ae0313d5b098d24154' -H 'Accept: application/json; charset=utf-8; inde
nt=4' "http://192.168.1.124:8000/api2/repos/bdf816e6-aba8-468c-962f-77c2fcfd1d1c/user-
folder-perm/"
```

Sample response

```
{
    "success": true
}
```

Errors

- 400 user_email invalid.

- 400 folder_path invalid.
- 403 Permission denied.
- 404 Library not found.
- 404 User not found.
- 500 Internal Server Error

Group Folder Permission

Get Group Folder Permission

GET http://192.168.1.124:8000/api2/repos/{repo_id}/group-folder-perm/?folder_path=/123

Request parameters

- repo_id
- folder_path

Sample request

```
curl -H 'Authorization: Token cbd7705c06846425ed5c46ae0313d5b098d24154' -H 'Accept: ap
plication/json; charset=utf-8; indent=4' "http://192.168.1.124:8000/api2/repos/bdf816e
6-aba8-468c-962f-77c2fcfd1d1c/group-folder-perm/?folder_path=/123"
```

Sample response

```
[
    {
        "repo_id": "bdf816e6-aba8-468c-962f-77c2fcfd1d1c",
        "folder_path": "/123",
        "permission": "rw",
        "group_name": "group-2-of-lian",
        "folder_name": "123",
        "group_id": 586
    },
    {
        "repo_id": "bdf816e6-aba8-468c-962f-77c2fcfd1d1c",
        "folder_path": "/123",
        "permission": "r",
        "group_name": "group-of-lian",
        "folder_name": "123",
        "group_id": 65
    }
]
```

Errors

- 403 Permission denied.
- 404 Library not found.

Set Group Folder Permission

POST http://192.168.1.124:8000/api2/repos/{repo_id}/group-folder-perm/

Request parameters

- repo_id
- folder_path
- group_id
- permission, `r` or `rw`

Sample request

```
curl -d "folder_path=/123&permission=rw&group_id=586&group_id=65" -H 'Authorization: T
oken cbd7705c06846425ed5c46ae0313d5b098d24154' -H 'Accept: application/json; charset=u
tf-8; indent=4' "http://192.168.1.124:8000/api2/repos/bdf816e6-aba8-468c-962f-77c2fcfd
1d1c/group-folder-perm/"
```

Sample response

```
{
    "failed": [
        {
            "group_id": 65,
            "error_msg": "Permission already exists."
        }
    ],
    "success": [
        {
            "repo_id": "bdf816e6-aba8-468c-962f-77c2fcfd1d1c",
            "folder_path": "/123",
            "permission": "rw",
            "group_name": "group-2-of-lian",
            "folder_name": "123",
            "group_id": 586
        }
    ]
}
```

Errors

- 400 folder_path invalid.
- 400 permission invalid.
- 403 Permission denied.
- 404 Library not found.
- 404 Folder not found.

Modify Group Folder Permission

PUT http://192.168.1.124:8000/api2/repos/{repo_id}/group-folder-perm/

Request parameters

- repo_id
- folder_path
- group_id
- permission, `r` or `rw`

Sample request

```
curl -X PUT -d "folder_path=/123&permission=rw&group_id=65" -H 'Authorization: Token c
bd7705c06846425ed5c46ae0313d5b098d24154' -H 'Accept: application/json; charset=utf-8;
indent=4' "http://192.168.1.124:8000/api2/repos/bdf816e6-aba8-468c-962f-77c2fcfd1d1c/g
roup-folder-perm/"
```

Sample response

```
{
    "repo_id": "bdf816e6-aba8-468c-962f-77c2fcfd1d1c",
    "folder_path": "/123",
    "permission": "rw",
    "group_name": "group-of-lian",
    "folder_name": "123",
    "group_id": 65
}
```

Errors

- 400 folder_path invalid.
- 400 permission invalid.
- 400 group_id invalid.
- 403 Permission denied.
- 404 Library not found.
- 404 Folder not found.
- 404 Group not found.
- 404 Folder permission not found.
- 500 Internal Server Error

Delete Group Folder Permission

DELETE http://192.168.1.124:8000/api2/repos/{repo_id}/group-folder-perm/

Request parameters

- repo_id
- folder_path
- group_id

Sample request

```
curl -X DELETE -d "folder_path=/123&group_id=65" -H 'Authorization: Token cbd7705c0684
6425ed5c46ae0313d5b098d24154' -H 'Accept: application/json; charset=utf-8; indent=4' "
http://192.168.1.124:8000/api2/repos/bdf816e6-aba8-468c-962f-77c2fcfd1d1c/group-folder
-perm/"
```

Sample response

```
{
    "success": true
}
```

Errors

- 400 group_id invalid.
- 400 folder_path invalid.
- 403 Permission denied.
- 404 Library not found.
- 404 Group not found.
- 500 Internal Server Error

Library

Get Default Library

GET https://cloud.seafile.com/api2/default-repo/

Sample request

```
curl -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd' "https://cloud
.seafile.com/api2/default-repo/"
```

Sample response

```
{
    "repo_id": "691b3e24-d05e-43cd-a9f2-6f32bd6b800e",
    "exists": true
}
```

Create Default Library

POST https://cloud.seafile.com/api2/default-repo/

Sample request

```
curl -X POST -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd' "https
://cloud.seafile.com/api2/default-repo/"
```

Sample response

```
{
    "repo_id": "691b3e24-d05e-43cd-a9f2-6f32bd6b800e",
    "exists": true
}
```

List Libraries

GET https://cloud.seafile.com/api2/repos/?type={type}

Request parameters

- type
    - `mine` , get my owned libraries.
    - `shared` , get libraries shared to me.
    - `group` , get group libraries.
    - `org` , get public libraires.

NOTE: If no `type` parameter contained in the url, this api will return all libraries user can access.

Sample request for get all libraries I can accessed

```
curl -H 'Authorization: Token 24fd3c026886e3121b2ca630805ed425c272cb96' -H 'Accept: ap
plication/json; indent=4' https://cloud.seafile.com/api2/repos/
```

Sample response for get all libraries I can accessed

```
[
    {
        "permission": "rw",
        "encrypted": false,
        "mtime_relative": "<time datetime=\"2017-08-12T10:48:42\" is=\"relative-time\"
 title=\"Sat, 12 Aug 2017 10:48:42 +0800\" >1 minute ago</time>",
        "mtime": 1502506122,
        "owner": "1@1.com",
        "root": "",
        "id": "b8c8eeaf-a62f-4ece-a2cb-e1c67f49f881",
        "size": 0,
        "name": "group-lib",
        "type": "repo",
        "virtual": false,
        "version": 1,
        "head_commit_id": "b0a8c797972b83af1054428a397f843612257425",
        "size_formatted": "0 bytes"
```

```
        },
        {
            "permission": "rw",
            "encrypted": false,
            "mtime_relative": "<time datetime=\"2017-08-03T17:42:49\" is=\"relative-time\"
 title=\"Thu, 3 Aug 2017 17:42:49 +0800\" >8 days ago</time>",
            "mtime": 1501753369,
            "owner": "1@1.com",
            "root": "",
            "id": "cd0df3ce-7e1b-4fc3-9b76-714c48db47d7",
            "size": 1449,
            "name": "My Library",
            "type": "repo",
            "virtual": false,
            "version": 1,
            "head_commit_id": "9d47232bb87d39dbbba54fb8f09f9795b2d396e4",
            "size_formatted": "1.4 KB"
        },
        {
            "owner_nickname": "lian",
            "permission": "rw",
            "encrypted": false,
            "mtime_relative": "<time datetime=\"2017-08-12T10:44:07\" is=\"relative-time\"
 title=\"Sat, 12 Aug 2017 10:44:07 +0800\" >6 minutes ago</time>",
            "mtime": 1502505847,
            "owner": "lian@lian.com",
            "root": "",
            "id": "c474a093-19dc-4ddf-b0b0-72b33214ba33",
            "size": 708833229,
            "name": "seacloud.cc.124",
            "share_type": "personal",
            "type": "srepo",
            "version": 1,
            "head_commit_id": "0b11fc08518d0c9acfd15e95a580664896484336",
            "size_formatted": "676.0 MB"
        },
        {
            "permission": "rw",
            "encrypted": false,
            "mtime": 1502506122,
            "owner": "asdf",
            "id": "b8c8eeaf-a62f-4ece-a2cb-e1c67f49f881",
            "size": 0,
            "name": "group-lib",
            "root": "",
            "version": 1,
            "head_commit_id": "b0a8c797972b83af1054428a397f843612257425",
            "type": "grepo",
            "groupid": 1675
        },
        {
            "share_from": "lian@lian.com",
            "permission": "rw",
            "encrypted": false,
            "mtime_relative": "<time datetime=\"2017-08-12T10:33:47\" is=\"relative-time\"
 title=\"Sat, 12 Aug 2017 10:33:47 +0800\" >16 minutes ago</time>",
```

```
        "mtime": 1502505227,
        "owner": "Organization",
        "root": "",
        "id": "050ef344-45fb-49b6-80e6-e1bf094ab7bd",
        "size": 0,
        "name": "public-repo",
        "share_type": "public",
        "type": "grepo",
        "version": 1,
        "head_commit_id": "b71a95373896eb52e2971d72a869b7c413791b0b",
        "size_formatted": "0 bytes"
    }
]
```

Sample request for get my owned libraries

```
curl -H "Authorization: Token 8cc0e7085a24b6abfee721e758b6aab4a90e7321" -H 'Accept: ap
plication/json; indent=4' "http://192.168.1.124:8000/api2/repos/?type=mine"
```

Sample response for get my owned libraries

```
        "mtime": 1502505227,
        "owner": "Organization",
```

```
[
    {
        "permission": "rw",
        "encrypted": false,
        "mtime_relative": "<time datetime=\"2017-08-12T10:48:42\" is=\"relative-time\"
 title=\"Sat, 12 Aug 2017 10:48:42 +0800\" >19 minutes ago</time>",
        "mtime": 1502506122,
        "owner": "1@1.com",
        "root": "",
        "id": "b8c8eeaf-a62f-4ece-a2cb-e1c67f49f881",
        "size": 0,
        "name": "group-lib",
        "type": "repo",
        "virtual": false,
        "version": 1,
        "head_commit_id": "b0a8c797972b83af1054428a397f843612257425",
        "size_formatted": "0 bytes"
    },
    {
        "permission": "rw",
        "encrypted": false,
        "mtime_relative": "<time datetime=\"2017-08-03T17:42:49\" is=\"relative-time\"
 title=\"Thu, 3 Aug 2017 17:42:49 +0800\" >8 days ago</time>",
        "mtime": 1501753369,
        "owner": "1@1.com",
        "root": "",
        "id": "cd0df3ce-7e1b-4fc3-9b76-714c48db47d7",
        "size": 1449,
        "name": "My Library",
        "type": "repo",
        "virtual": false,
        "version": 1,
        "head_commit_id": "9d47232bb87d39dbbba54fb8f09f9795b2d396e4",
        "size_formatted": "1.4 KB"
    }
]
```

Get Library Info

GET https://cloud.seafile.com/api2/repos/{repo-id}/

Request parameters

- repo-id

Sample request

```
curl -G -H 'Authorization: Token 24fd3c026886e3121b2ca630805ed425c272cb96' -H 'Accept:
 application/json; indent=4' https://cloud.seafile.com/api2/repos/632ab8a8-ecf9-4435-9
3bf-f495d5bfe975/
```

Sample response

```
{
"encrypted": false,
"password_need": null,
"mtime": null,
"owner": "self",
"id": "632ab8a8-ecf9-4435-93bf-f495d5bfe975",
"size": 1356155,
"name": "org",
"root": "b5227040de360dd22c5717f9563628fe5510cbce",
"desc": "org file",
"type": "repo"
}
```

Get Library Owner

GET https://cloud.seafile.com/api2/repos/{repo-id}/owner/

Request parameters

- repo-id

Sample request

```
curl -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d9b477fd' -H 'Accept: app
lication/json; indent=4' https://cloud.seafile.com/api2/repos/dae8cecc-2359-4d33-aa42-
01b7846c4b32/owner/
```

Sample response

```
{
"owner": "user@example.com"
}
```

Errors

- 403 Permission error(only administrator/repo-owner can perform this action).

Get Library History

GET https://cloud.seafile.com/api/v2.1/repos/{repo_id}/history/

Request parameters

- repo_id
- page, default 1
- per_page, default 100

Sample request

```
curl -H 'Authorization: Token 0eb24ce5db35a31f70171eca2f760f03f59fa09a' -H 'Accept: ap
plication/json; charset=utf-8; indent=4' "https://cloud.seafile.com/api/v2.1/repos/746
0f7ac-a0ff-4585-8906-bb5a57d2e118/history/"
```

Sample response

```
{
    "data": [
        {
            "commit_id": "2b1313e4bbce2b938403c829b114b12b549128a3",
            "time": "2017-04-10T03:24:09+00:00",
            "description": "Recovered deleted directory \"456\"",
            "creator": "lian@lian.com"
        },
        {
            "commit_id": "0be8bba456ece31598557d9f3d5471b5b4d9d7c0",
            "time": "2017-04-10T03:23:49+00:00",
            "description": "Removed directory \"456\"",
            "creator": "lian@lian.com"
        },
        {

            "commit_id": "e6f21a80d60b7f1797434fdab622e562af937f81",
            "time": "2017-04-10T03:23:45+00:00",
            "description": "Deleted \"empty.docx\"",
            "creator": "lian@lian.com"
        },
        {

            "commit_id": "0bddb7401a75a9799209a24fb118e8d49151b6d6",
            "time": "2017-04-10T03:23:41+00:00",
            "description": "Deleted \"QQ_account_manager.png\"",
            "creator": "lian@lian.com"
        }
    ],
    "more": false
}
```

Errors

- 403 Permission denied.
- 404 Library not found.
- 500 Internal Server Error

Get Library Trash

GET https://cloud.seafile.com/api/v2.1/repos/{repo_id}/trash/

Request parameters

- repo_id
- path, default '/'.

- per_page, default 100.
- scan_stat, An opaque status returned by the last call. In the first call, None must be passed. The last entry of the result list contains a 'scan_stat' attribute. In the next call, pass in the returned 'scan_stat'.

Sample request

```
curl -H 'Authorization: Token 0eb24ce5db35a31f70171eca2f760f03f59fa09a' -H 'Accept: ap
plication/json; charset=utf-8; indent=4' "https://cloud.seafile.com/api/v2.1/repos/746
0f7ac-a0ff-4585-8906-bb5a57d2e118/trash/"
```

Sample response

```
{
    "scan_stat": "2b1313e4bbce2b938403c829b114b12b549128a3",
    "data": [
        {
            "commit_id": "2364981a2bef50c16281a664df55af209019a88c",
            "scan_stat": null,
            "obj_id": "f86ef37332e89d6a132e27ce857c76e15971b227",
            "deleted_time": "2017-04-10T03:23:41+00:00",
            "obj_name": "QQ_account_manager.png",
            "is_dir": false,
            "parent_dir": "/",
            "size": 77970
        },
        {
            "commit_id": "0bddb7401a75a9799209a24fb118e8d49151b6d6",
            "scan_stat": null,
            "obj_id": "10ae7309338efe92d9ceddb9d6835463d277da34",
            "deleted_time": "2017-04-10T03:23:45+00:00",
            "obj_name": "empty.docx",
            "is_dir": false,
            "parent_dir": "/456/",
            "size": 10682
        }
        ...
    ],
    "more": true
}
```

Get more trash items.

Sample request

```
curl -H 'Authorization: Token 0eb24ce5db35a31f70171eca2f760f03f59fa09a' -H 'Accept: ap
plication/json; charset=utf-8; indent=4' "https://cloud.seafile.com/api/v2.1/repos/746
0f7ac-a0ff-4585-8906-bb5a57d2e118/trash/?scan_stat=2b1313e4bbce2b938403c829b114b12b549
128a3"
```

Sample response

```
{
    "scan_stat": null,
    "data": [
        {
            "commit_id": "726d2ce009df9176592ab88eca297b5e50c15639",
            "scan_stat": null,
            "obj_id": "cfc5e4299a862b366c98eeb7f5a8a1f689d2916a",
            "deleted_time": "2017-04-10T09:11:02+00:00",
            "obj_name": "empty.xlsx",
            "is_dir": false,
            "parent_dir": "/456/",
            "size": 8176
        },
        {
            "commit_id": "2b1313e4bbce2b938403c829b114b12b549128a3",
            "scan_stat": null,
            "obj_id": "414a75f5c67ca56c480ca2ae9137b7812940c3ce",
            "deleted_time": "2017-04-10T09:11:01+00:00",
            "obj_name": "empty.pptx",
            "is_dir": false,
            "parent_dir": "/456/",
            "size": 40506
        }
    ],
    "more": false
}
```

Errors

- 403 Permission denied.
- 404 Library not found.
- 500 Internal Server Error

Get Library History Limit Days

GET https://cloud.seafile.com/api2/repos/{repo-id}/history-limit/

Request parameters

- repo-id

Sample request

```
curl -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d9b477fd' -H 'Accept: app
lication/json; indent=4' https://cloud.seafile.com/api2/repos/dae8cecc-2359-4d33-aa42-
01b7846c4b32/history-limit/
```

Sample response

```
{
"keep_days": -1,
}
```

Errors

- 403 Permission denied.
- 404 Library not found.
- 500 Internal Server Error

Set Library History Limit Days

PUT https://cloud.seafile.com/api2/repos/{repo-id}/history-limit/

Request parameters

- repo-id
- keep_days. -1 for keep full history; 0 for do not keep history; positive number for keep a period of limit days.

Sample request

```
curl -v -X PUT -d "keep_days=4" -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e
61d99b477fd' -H 'Accept: application/json; charset=utf-8; indent=4' https://cloud.seaf
ile.com/api2/repos/dae8cecc-2359-4d33-aa42-01b7846c4b32/history-limit/
```

Sample response

```
{
"keep_days": 4,
}
```

Errors

- 400 keep_days invalid.
- 403 Permission denied.
- 404 Library not found.
- 500 Internal Server Error
- 520 Failed to set library history limit.

Create Library

POST https://cloud.seafile.com/api2/repos/

Request parameters

- name

- desc (defaults to "new repo")
- passwd (needed by encrypt library)

Sample request

```
curl -v -d "name=foo&desc=new library" -H 'Authorization: Token f2210dacd9c6ccb8133606
d94ff8e61d99b477fd' -H 'Accept: application/json; indent=4' https://cloud.seafile.com/
api2/repos/
```

Sample response

```
{
"encrypted": "",
"enc_version": 0,
"repo_id": "f15811fd-5c19-412c-b143-2ac83f352290",
"magic": "",
"relay_id": "c5e41170db250ea497075e2911104faf0105b7fb",
"repo_version": 1,
"relay_addr": "cloud.seafile.com",
"token": "c1f3defe9ba408cd7964427ec276843e9d10c23b",
"relay_port": "10001",
"random_key": "",
"email": "user@mail.com",
"repo_name": "foo"
}
```

Success

Response code 200 and newly created library information are returned.

Errors

- 400 Library name missing.
- 520 Operation failed.

Check/Create Sub Library

check if a dir has a corresponding sub_repo, if it does not have, create one

GET https://cloud.seafile.com/api2/repos/{repo-id}/dir/sub_repo/?p=/&name=sub_lib

Request parameters

- repo-id
- p
- name

Sample request

```
curl -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d9b477fd' -H 'Accept: app
lication/json; indent=4' https://cloud.seafile.com/api2/repos/dae8cecc-2359-4d33-aa42-
01b7846c4b32/dir/sub_repo/?p=/\&name=sub_lib
```

Sample response

```
{"sub_repo_id": "c0a3283c-013c-4a7c-8f68-006f06fa6dec"}
```

Errors

- 400 Argument missing
- 500 INTERNAL SERVER ERROR

Delete Library

DELETE https://cloud.seafile.com/api2/repos/{repo-id}/

Sample request

```
curl -v -X DELETE -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd' -
H 'Accept: application/json; indent=4' https://cloud.seafile.com/api2/repos/8f5f2222-7
2a8-454f-ac40-8397c5a556a8/
```

Sample response

"success"

Errors

- 400 Library does not exist.

- 403 Only library owner can perform this operation.

Rename Library

POST https://cloud.seafile.com/api2/repos/{repo-id}/?op=rename

Sample request

```
curl -d "repo_name=new-repo-name"  -H 'Authorization: Token f2210dacd9c6ccb8133606d94f
f8e61d99b477fd' -H 'Accept: application/json; indent=4' https://cloud.seafile.com/api2
/repos/8f5f2222-72a8-454f-ac40-8397c5a556a8/op=rename
```

Sample response

"success"

Errors

- 404 Library not found.
- 403 You do not have permission to rename this library.
- 500 Unable to rename library

Transfer Library

PUT https://cloud.seafile.com/api2/repos/{repo-id}/owner/

Request parameters

- repo-id
- owner

Sample request

```
curl -v -X PUT -d "owner=new@owner.com" -H 'Authorization: Token f2210dacd9c6ccb813360
6d94ff8e61d9b477fd' -H 'Accept: application/json; indent=4' https://cloud.seafile.com/
api2/repos/dae8cecc-2359-4d33-aa42-01b7846c4b32/owner/
```

Sample response

```
{
"success": True
}
```

Errors

- 440 Email invalid.
- 403 Permission error(only administrator/repo-owner can perform this action).
- 404 Library not found.
- 404 User not found.

Decrypt Library

POST https://cloud.seafile.com/api2/repos/{repo-id}/

Request parameters

- password

Sample request

```
curl -v -d "password=123" -H 'Authorization: Token e6a33d61954f219a96b60f635cf02717964
e4385' -H 'Accept: application/json; indent=4' https://cloud.seafile.com/api2/repos/0c
2465a5-4753-4660-8a22-65abec9ec8d0/
```

Sample response

"success"

Errors

- 400 Incorrect password
- 409 Repo is not encrypt
- 500 Internal server error

Create Public Library

POST https://cloud.seafile.com/api2/repos/public/

Request parameters

- name
- permission, `r` or `rw` , default `r` .
- passwd (optional).

Sample request, create an encrypted public repo with `rw` permission

```
curl -X POST -d "name=test-public-repo&permission=rw&passwd=password" -H 'Authorizatio
n: Token f2210dacd9c6ccb8133606d94ff8e61d9b477fd' -H 'Accept: application/json; indent
=4' https://cloud.seafile.com/api2/repos/public/
```

Sample response

```
{
    "owner_nickname": "lian",
    "permission": "rw",
    "encrypted": true,
    "mtime_relative": "<time datetime=\"2016-05-31T12:01:49\" is=\"relative-time\" tit
le=\"Tue, 31 May 2016 12:01:49 +0800\" >1 second ago</time>",
    "mtime": 1464667309,
    "owner": "lian@lian.com",
    "id": "6553fd8b-bf3e-41ad-a481-90c8523d3b4a",
    "size": 0,
    "name": "test-public-repo",
    "desc": "",
    "size_formatted": "0 bytes"
}
```

Errors

- 400 Library name is required.
- 400 Invalid permission
- 403 You do not have permission to create library.
- 403 NOT allow to create encrypted library.

Set Exist Lib as Public Library

PUT https://cloud.seafile.com/api2/shared-repos/{repo-id}/?share_type=public

Request parameters

- repo_id
- share_type, must be `public`
- permission, `r` or `rw`.

Sample request, create an encrypted public repo with `rw` permission

```
curl -X PUT -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d9b477fd' -H 'Acce
pt: application/json; indent=4' 'https://cloud.seafile.com/api2/shared-repos/2deffbac-
d7be-4ace-b406-efb799083ee9/?share_type=public&permission=rw'
```

Sample response

```
success
```

Errors

- 400 Permission need to be rw or r.
- 403 You do not have permission to share library.
- 500 Failed to share library to public.

Remove Public Library

DELETE https://cloud.seafile.com/api2/shared-repos/{repo-id}/?share_type=public

Request parameters

- repo-id
- share_type

Sample request

```
curl -X DELETE -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d9b477fd' -H 'A
ccept: application/json; indent=4' https://cloud.seafile.com/api2/shared-repos/dae8cec
c-2359-4d33-aa42-01b7846c4b32/?share_type=public
```

Success

```
"success"
```

Errors

- 400 Share type is required.
- 400 Share type can only be personal or group or public.
- 403 You do not have permission to unshare library.

Fetch library download info

GET https://cloud.seafile.com/api2/repos/{repo-id}/download-info/

Request parameters

- repo-id

Sample request

```
curl -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d9b477fd' -H 'Accept: app
lication/json; indent=4' https://cloud.seafile.com/api2/repos/dae8cecc-2359-4d33-aa42-
01b7846c4b32/download-info/
```

Sample response

```
{
"applet_root": "https://localhost:13420",
"relay_addr": "localhost",
"token": "46acc4d9ca3d6a5c7102ef379f82ecc1edc629e1",
"repo_id": "dae8cecc-2359-4d33-aa42-01b7846c4b32",
"relay_port": "10002",
"encrypted": "",
"repo_name": "test",
"relay_id": "8e4b13b49ca79f35732d9f44a0804940d985627c",
"email": "user@example.com"
}
```

Search Files in Libraries

GET https://cloud.seafile.com/api2/search/

Request parameters

- `q` , keyword for searching.

- `page` , optional, a number greater than or equal to **1**.

- `per_page` , optional.

- `search_repo` , `all` or a *repo_id*, (`all` for searching in all libraries), optional.

- `search_ftypes` , `all` or `custom` , (`all` for searching all file types, `custom` for only searching the specific file types you defined in `ftype` and `input_fexts`).

- `ftype` , must be in (`Text` , `Document` , `Image` , `Video` , `Audio` , `PDF` , `Markdown`).

- `input_fexts` , file extensions manually specific.

- `with_permission` , `true` or `false` . Whether return permission info of the file or not, default is `false` .

Sample request

```
curl -H 'Authorization: Token 076de58233c09f19e7a5179abff14ad55987350e' -H 'Accept: ap
plication/json; charset=utf-8; indent=4' "https://cloud.seafile.com/api2/search/?q=sea
file&search_repo=all&search_ftypes=custom&ftype=Document&input_fexts=md,png&per_page=3
&page=3&with_permission=true"
```

Sample response

```
{
    "has_more": true,
    "total": 336,
    "results": [
        {
            "repo_id": "040a8aad-5646-4c68-ba8a-73f90c60089f",
            "name": "seafile \u8fd0\u7ef4.docx",
            "permission": "r",
            "oid": "ecba7db3d6b818873bf94cb1f2161f6a0fc22494",
            "last_modified": 1482910730,
            "content_highlight": "... .<b>seafile</b>.com...",
            "fullpath": "/\u4e1c\u98ce\u65e5\u4ea7/Archived/seafile \u8fd0\u7ef4.docx"
,
            "repo_name": "\u4ee3\u7ef4\u5ba2\u6237",
            "is_dir": false,
            "size": 494490
        },
        {
            "repo_id": "233191c7-8e33-4fd2-b0a3-e480363d8e0d",
            "name": "seafile-tutorial.doc",
            "permission": "rw",
            "oid": "1066014004ad479dd7f3cc0a12462c3f1fd2edeb",
            "last_modified": 1389771193,
            "content_highlight": "...A Brief Tour of <b>Seafile</b> <b>Seafile</b> is
a file m...",
            "fullpath": "/\u4ea7\u54c1\u4f7f\u7528\u6587\u6863/seafile-tutorial.doc",
            "repo_name": "seafile-dev",
            "is_dir": false,
            "size": 414208
        },
        {
            "repo_id": "233191c7-8e33-4fd2-b0a3-e480363d8e0d",
            "name": "seafile_vm.md",
            "permission": "rw",
            "oid": "66c8dbe139333ead26b4878340da486fffdc5330",
            "last_modified": 1439277140,
            "content_highlight": "...<b>Seafile</b> server VM...",
            "fullpath": "/\u90e8\u7f72\u548c\u8fd0\u7ef4/seafile_vm.md",
            "repo_name": "seafile-dev",
            "is_dir": false,
            "size": 3255
        }
    ]
}
```

Errors

- 404 Search not supported.
- 400 Missing argument q.

Get Library Download Links

GET https://cloud.seafile.com/api2/repos/{repo-id}/download-shared-links/

Request parameters

- repo-id

Sample request

```
curl -H 'Authorization: Token 24fd3c026886e3121b2ca630805ed425c272cb96' -H 'Accept: ap
plication/json; indent=4' https://cloud.seafile.com/api2/repos/632ab8a8-ecf9-4435-93bf
-f495d5bfe975/download-shared-links/
```

Sample response

```
[
    {
        "view_count": 0,
        "name": "/",
        "share_type": "d",
        "creator_name": "lian",
        "create_by": "lian@lian.com",
        "token": "105f108fb6",
        "create_time": "2016-01-18T15:03:10+0800",
        "path": "/",
        "size": ""
    },
    {
        "view_count": 3,
        "name": "1.md",
        "share_type": "f",
        "creator_name": "lian",
        "create_by": "lian@lian.com",
        "token": "a626012c1b",
        "create_time": "2016-01-19T11:27:43+0800",
        "path": "/1.md",
        "size": "4"
    }
]
```

Errors

- 403 Permission denied.
- 404 Library not found.

Get Library Upload Links

GET https://cloud.seafile.com/api2/repos/{repo-id}/upload-shared-links/

Request parameters

- repo-id

Sample request

```
curl -H 'Authorization: Token 24fd3c026886e3121b2ca630805ed425c272cb96' -H 'Accept: ap
plication/json; indent=4' https://cloud.seafile.com/api2/repos/632ab8a8-ecf9-4435-93bf
-f495d5bfe975/upload-shared-links/
```

Sample response

```
[
    {
        "view_count": 3,
        "name": "/",
        "creator_name": "lian",
        "create_by": "lian@lian.com",
        "token": "43340efca5",
        "create_time": "2016-01-18T15:03:12+0800",
        "path": "/"
    },
    {
        "view_count": 8,
        "name": "a&b",
        "creator_name": "lian",
        "create_by": "lian@lian.com",
        "token": "f1e49d445a",
        "create_time": "2016-01-18T15:03:18+0800",
        "path": "/a&b/"
    }
]
```

Errors

- 403 Permission denied.
- 404 Library not found.

Delete Library Download Link

GET https://cloud.seafile.com/api2/repos/{repo-id}/download-shared-links/{token}/

Request parameters

- repo-id
- token

Sample request

```
curl -X DELETE -H 'Authorization: Token 24fd3c026886e3121b2ca630805ed425c272cb96' -H '
Accept: application/json; indent=4' https://cloud.seafile.com/api2/repos/632ab8a8-ecf9
-4435-93bf-f495d5bfe975/download-shared-links/105f108fb6/
```

Sample response

```
{"success": true}
```

Errors

- 403 Permission denied.
- 404 Library not found.
- 404 Link not found.

Delete Library Upload Link

GET https://cloud.seafile.com/api2/repos/{repo-id}/upload-shared-links/{token}/

Request parameters

- repo-id
- token

Sample request

```
curl -X DELETE -H 'Authorization: Token 24fd3c026886e3121b2ca630805ed425c272cb96' -H '
Accept: application/json; indent=4' https://cloud.seafile.com/api2/repos/632ab8a8-ecf9
-4435-93bf-f495d5bfe975/upload-shared-links/f1e49d445a/
```

Sample response

```
{"success": true}
```

Errors

- 403 Permission denied.
- 404 Library not found.
- 404 Link not found.

Search Library By Name

GET https://cloud.seafile.com/api2/repos/

Request parameters

- type (optional)
- nameContains (optional)

Sample request

```
Search the all library

curl -H 'Authorization: Token 24fd3c026886e3121b2ca630805ed425c272cb96' -sS 'https://c
loud.seafile.com/api2/repos/?nameContains=T'
```

Sample response

```
[
    {
        "root": "",
        "modifier_email": null,
        "name": "TEST",
        "permission": "rw",
        "size_formatted": "424.6 MB",
        "virtual": false,
        "mtime_relative": "<time datetime=\"2017-07-04T08:30:33\" is=\"relative-time\"
 title=\"Tue, 4 Jul 2017 08:30:33 +0000\" >2017-07-04</time>",
        "head_commit_id": "05418e616a5325b3f0ccfaf7d4c54c803b8168de",
        "encrypted": false,
        "version": 1,
        "mtime": 1499157033,
        "owner": "admin@admin.com",
        "modifier_contact_email": "",
        "type": "repo",
        "id": "a9025464-2c72-4b9c-9cdd-6de62e56f696",
        "modifier_name": "",
        "size": 445243555
    }
]
```

Sample request

```
Search the specified library

curl -H 'Authorization: Token 24fd3c026886e3121b2ca630805ed425c272cb96' -sS 'https://c
loud.seafile.com/api2/repos/?type=mime&nameContains=T'
```

Sample response

```
[]
```

Errors

None

File

View File Through Owa

GET https://cloud.seafile.com/api2/repos/{repo-id}/owa-file/?path=/foo.docx

Request parameters

- repo-id
- path
- action, `view` or `edit` , default value is `view` ;

Sample request for view

```
curl  -v  -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd' -H 'Accep
t: application/json; charset=utf-8; indent=4' 'https://cloud.seafile.com/api2/repos/da
e8cecc-2359-4d33-aa42-01b7846c4b32/owa-file/?path=/foo.docx'
```

Sample response for view

```
{
    "access_token": "7decacff-6e55-4856-9734-01aaab26ef45",
    "action_url": "http://off1.off.com/wv/wordviewerframe.aspx?WOPIsrc=http%3A%2F%2F19
2.168.1.124%3A8000%2Fapi2%2Fwopi%2Ffiles%2F2b0750085925fa85238e5f64cfd13ed6f1076bfd%2F
",
    "access_token_ttl": 1456906784000
}
```

Sample request for edit

```
curl  -v  -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd' -H 'Accep
t: application/json; charset=utf-8; indent=4' 'https://cloud.seafile.com/api2/repos/da
e8cecc-2359-4d33-aa42-01b7846c4b32/owa-file/?path=/foo.docx&action=edit'
```

Sample response for edit

```
{
    "access_token": "bb80a7934b42454189ade73bdfba7f62",
    "action_url": "http://off1.off.com/we/wordeditorframe.aspx?WOPISrc=http%3A%2F%2F19
2.168.1.227%3A8000%2Fapi2%2Fwopi%2Ffiles%2F1ef1da7af8dc2d02f85f156dba779a31ff1db9f7&ui
=zh-CN&rs=zh-CN",
    "access_token_ttl": 1496925674000
}
```

After get response

In order to instantiate the Office Online applications, a host must create an HTML page that
will host an iframe element within it pointing to a particular WOPI action URL. And then use
a form element and POST the `access_token` and `access_token_ttl` values to the Office
Online.

For more info, you can see this official docs.

Errors

- 400 path invalid.
- 403 permission denied.
- 403 Library encrypted.
- 403 Office Web App feature not enabled.
- 403 Office Web App feature only supported in professional edition.
- 404 File/Library not found.
- 500 Internal Server Error

Download File

GET https://cloud.seafile.com/api2/repos/{repo-id}/file/?p=/foo

Request parameters

- repo-id
- p
- reuse (optional): Set `reuse` to `1` if you want the generated download link can be accessed more than once in one hour.

Sample request

```
curl -v -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd' -H 'Accept: application/json; charset=utf-8; indent=4' 'https://cloud.seafile.com/api2/repos/dae8cecc-2359-4d33-aa42-01b7846c4b32/file/?p=/foo.c&reuse=1'
```

Sample response

```
"https://cloud.seafile.com:8082/files/adee6094/foo.c"
```

Errors

- 400 Path is missing
- 404 File not found
- 520 Operation failed.

Get File Detail

GET https://cloud.seafile.com/api2/repos/{repo-id}/file/detail/?p=/foo.c

- repo-id
- p

Sample request

```
curl -H 'Authorization: Token f2210dacd3606d94ff8e61d99b477fd' -H 'Accept: application
/json; charset=utf-8; indent=4' https://cloud.seafile.com/api2/repos/dae8cecc-2359-4d3
3-aa42-01b7846c4b32/file/detail/?p=/foo.c
```

Sample response

```
{
"id": "013d3d38fed38b3e8e26b21bb3463eab6831194f",
"mtime": 1398148877,
"type": "file",
"name": "foo.py",
"size": 22
}
```

Errors

- 400 Path is missing
- 520 Operation failed.

Get File History

GET https://cloud.seafile.com/api2/repos/{repo-id}/file/history/?p=/foo.c

Request parameters

- repo-id
- p

Sample request

```
curl -H 'Authorization: Token f2210dacd3606d94ff8e61d99b477fd' -H 'Accept: application
/json; charset=utf-8; indent=4' https://cloud.seafile.com/api2/repos/dae8cecc-2359-4d3
3-aa42-01b7846c4b32/file/history/?p=/foo.c
```

Sample response

```
{
"commits":
    [
        {
        "rev_file_size": 0,
        "repo_id": "a582d3bc-bcf5-421e-9125-741fa56d18d4",
        "ctime": 1398149763,
        "creator_name": "user@example.com",
        "creator": "0000000000000000000000000000000000000000",
        "root_id": "b64d413d9894c9206beac3faf9c2a0d75b4a8ebf",
        "rev_renamed_old_path": null,
        "parent_id": "8e546762e1657ab22dad83e9cb1e5ea31a767c9a",
        "new_merge": false,
        "version": 1,
        "conflict": false,
        "desc": "Added \"foo.c\"",
        "id": "9464f7499bfa7363d563282361339eaf96a93318",
        "rev_file_id": "0000000000000000000000000000000000000000",
        "second_parent_id": null
        },
        {
        "rev_file_size": 0,
        "repo_id": "a582d3bc-bcf5-421e-9125-741fa56d18d4",
        "ctime": 1398146059,
        "creator_name": "user@example.com",
        "creator": "0000000000000000000000000000000000000000",
        "root_id": "572413414257c76039897e00aeb35f819471206b",
        "rev_renamed_old_path": null,
        "parent_id": "f977bdb0ebb205645c3b42216c2817e511c3f68f",
        "new_merge": false,
        "version": 1,
        "conflict": false,
        "desc": "Added \"foo.c\"",
        "id": "a1ec20709675f4dc8db825cdbca296be245d189b",
        "rev_file_id": "0000000000000000000000000000000000000000",
        "second_parent_id": null
        }
    ]
}
```

Errors

- 400 Path is missing
- 404 File not found

Restore File From History

POST https://cloud.seafile.com/api/v2.1/repos/7460f7ac-a0ff-4585-8906-bb5a57d2e118/file/?p=/1.md

Request parameters

- repo_id
- p
- operation
- commit_id

Sample request

```
curl -d "operation=revert&commit_id=7ed3ccdc7559d1afddb95bc050230e3d54bbffef" -H "Auth
orization: Token 0eb24ce5db35a31f70171eca2f760f03f59fa09a" -H 'Accept: application/jso
n; indent=4' "https://cloud.seafile.com/api/v2.1/repos/7460f7ac-a0ff-4585-8906-bb5a57d
2e118/file/?p=/1.md"
```

Sample response

```
{
    "success": true
}
```

Errors

- 400 commit_id invalid.
- 403 Permission denied.
- 403 File is locked
- 500 Internal Server Error
- 500 Check file lock error

Download File From a Revision

GET https://cloud.seafile.com/api2/repos/{repo-id}/file/revision/?
p=/foo.c&commit_id=a1ec20709675f4dc8db825cdbca296be245d189b

Request parameters

- repo-id
- p
- commit_id

Sample request

```
curl -H 'Authorization: Token f2210dacd3606d94ff8e61d99b477fd' -H 'Accept: application
/json; charset=utf-8; indent=4' https://cloud.seafile.com/api2/repos/dae8cecc-2359-4d3
3-aa42-01b7846c4b32/file/revision/?p=/foo.c\&commit_id=a1ec20709675f4dc8db825cdbca296b
e245d189b
```

Sample response

```
"https://cloud.seafile.com:8082/files/adee6094/foo.c"
```

Errors

- 400 Path is missing
- 404 Revision not found

Create File

POST https://cloud.seafile.com/api/v2.1/repos/{repo_id}/file/?p={file_path}

Request parameters

- repo-id
- p
- operation

Sample request

```
curl -d 'operation=create' -H 'Authorization: Token c5de3074be40861f399f02c65149c6460b
bf073f' "https://cloud.seafile.com/api/v2.1/repos/7460f7ac-a0ff-4585-8906-bb5a57d2e118
/file/?p=/test.xlsx"
```

Sample response

```
{
    'is_locked': False,
    'mtime': '2017-09-12T14:57:42+08:00',
    'obj_id': u'44bdca6005429390d1ecc6943b05c821bd30917a',
    'obj_name': u'test.xlsx',
    'parent_dir': u'/',
    'repo_id': u'7460f7ac-a0ff-4585-8906-bb5a57d2e118',
    'size': 7631,
    'type': 'file'
}
```

Errors

- 400 operation/name invalid.
- 400 operation can only be 'create', 'rename', 'move', 'copy' or 'revert'.
- 404 Library/Folder not found.
- 403 Permission denied.
- 500 Internal Server Error

Rename File

POST https://cloud.seafile.com/api2/repos/{repo-id}/file/?p=/foo.c

Request parameters

- repo-id
- p
- operation=rename
- newname

Sample request

```
curl -v -d "operation=rename&newname=newfoo.c" -H 'Authorization: Token f2210dacd9c6cc
b8133606d94ff8e61d99b477fd' -H 'Accept: application/json; charset=utf-8; indent=4' htt
ps://cloud.seafile.com/api2/repos/dae8cecc-2359-4d33-aa42-01b7846c4b32/file/?p=/foo.c
```

Sample response

```
...
< HTTP/1.1 301 MOVED PERMANENTLY
...
"success"
```

Success

Response code is 301, and a string `"success"` is returned.

Errors

- 400 BAD REQUEST, Path is missing or invalid(e.g. p=/) or newname is missing(newname too long)
- 403 FORBIDDEN, You do not have permission to rename file
- 404 NOT FOUND, repo not found
- 409 CONFLICT, the newname is the same to the old
- 520 OPERATION FAILED, fail to rename file

Lock File

PUT https://cloud.seafile.com/api2/repos/{repo-id}/file/

Request parameters

- repo-id
- p
- operation

Sample request

```
curl -v -X PUT -d "operation=lock&p=/foo.c" -H 'Authorization: Token f2210dacd9c6ccb81
33606d94ff8e61d99b477fd' -H 'Accept: application/json; charset=utf-8; indent=4' https:
//cloud.seafile.com/api2/repos/dae8cecc-2359-4d33-aa42-01b7846c4b32/file/
```

Sample response

```
...
< HTTP/1.0 200 OK
...
"success"
```

Success

Response code is 200, and a string `"success"` is returned.

Errors

- 400 BAD REQUEST, Path is missing or invalid(e.g. p=/)
- 403 FORBIDDEN, You do not have permission to lock file
- 404 NOT FOUND, repo not found
- 520 OPERATION FAILED, fail to lock file

Unlock File

PUT https://cloud.seafile.com/api2/repos/{repo-id}/file/

Request parameters

- repo-id
- p
- operation

Sample request

```
curl -v -X PUT -d "operation=unlock&p=/foo.c" -H 'Authorization: Token f2210dacd9c6ccb
8133606d94ff8e61d99b477fd' -H 'Accept: application/json; charset=utf-8; indent=4' http
s://cloud.seafile.com/api2/repos/dae8cecc-2359-4d33-aa42-01b7846c4b32/file/
```

Sample response

```
...
< HTTP/1.0 200 OK
...
"success"
```

Success

Response code is 200, and a string `"success"` is returned.

Errors

- 400 BAD REQUEST, Path is missing or invalid(e.g. p=/)
- 403 FORBIDDEN, You do not have permission to lock file
- 404 NOT FOUND, repo not found
- 520 OPERATION FAILED, fail to unlock file

Move File

POST https://cloud.seafile.com/api2/repos/{repo-id}/file/?p=/foo.c

Request parameters

- repo-id
- p
- operation
- dst_repo
- dst_dir

Sample request

```
curl -v -d "operation=move&dst_repo=affc837f-7fdd-4e91-b88a-32caf99897f2&dst_dir=/123"
 -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd' -H 'Accept: applic
ation/json; charset=utf-8; indent=4' https://cloud.seafile.com/api2/repos/dae8cecc-235
9-4d33-aa42-01b7846c4b32/file/?p=/foo.c
```

Sample response

```
...
< HTTP/1.1 301 MOVED PERMANENTLY
...
{
    "repo_id": "affc837f-7fdd-4e91-b88a-32caf99897f2",
    "parent_dir": "/123",
    "obj_name": "foo.c"
}
```

Success

Response code is 301, and a string `"success"` is returned.

Errors

- 400 BAD REQUEST, Path is missing or invalid(e.g. p=/)
- 403 FORBIDDEN, You do not have permission to move file
- 404 NOT FOUND, repo not found

- 500 INTERNAL SERVER ERROR

Copy File

POST https://cloud.seafile.com/api2/repos/{repo-id}/file/?p=/foo.c

Request parameters

- repo-id
- p
- operation
- dst_repo
- dst_dir

Sample request

```
curl -v -d "operation=copy&dst_repo=73ddb2b8-dda8-471b-b7a7-ca742b07483c&dst_dir=/123"
 -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd' -H 'Accept: applic
ation/json; charset=utf-8; indent=4' https://cloud.seafile.com/api2/repos/c7436518-5f4
6-4296-97db-2fcba4c8c8db/file/?p=/foo.c
```

Sample response

```
...
< HTTP/1.1 200 OK
...
{
    "repo_id": "73ddb2b8-dda8-471b-b7a7-ca742b07483c",
    "parent_dir": "/123",
    "obj_name": "foo.c"
}
```

Success

Response code is 200, and a string `"success"` is returned.

Errors

- 400 BAD REQUEST, Path is missing or invalid(e.g. p=/)
- 403 FORBIDDEN, You do not have permission to copy file
- 500 INTERNAL SERVER ERROR

Revert File

PUT https://cloud.seafile.com/api2/repos/{repo_id}/file/revert/

Request parameters

- repo_id

- p
- commit_id

Sample request

```
curl -v -X PUT -d "commit_id=a1ec20709675f4dc8db825cdbca296be245d189b&p=/foo.c" -H "Au
thorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd" -H 'Accept: application/j
son; indent=4' https://cloud.seafile.com/api2/repos/8f5f2222-72a8-454f-ac40-8397c5a556
a8/file/revert/
```

Sample response

```
...
< HTTP/1.0 200 OK
...

{"ret": 0}
```

Success

```
Response code 200(OK) is returned.
```

Errors

- 400 Path is missing

Delete File

DELETE https://cloud.seafile.com/api2/repos/{repo-id}/file/?p=/foo

Request parameters

- repo-id
- p

Sample request

```
curl -X DELETE -v  -H 'Authorization: Token f2210dacd3606d94ff8e61d99b477fd' -H 'Accep
t: application/json; charset=utf-8; indent=4' https://cloud.seafile.com/api2/repos/dae
8cecc-2359-4d33-aa42-01b7846c4b32/file/?p=/foo.c
```

Sample response

```
...
< HTTP/1.0 200 OK
...
"success"
```

Errors

- 400 Path is missing
- 520 Operation failed.

Note

This can also be used to delete directory.

Upload File

Get Upload Link

GET https://cloud.seafile.com/api2/repos/{repo-id}/upload-link/?p=/upload-dir

Request parameters

- repo-id
- p (use '/' as default)

Sample request

```
curl -H "Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd" https://cloud.
seafile.com/api2/repos/99b758e6-91ab-4265-b705-925367374cf0/upload-link/
```

Sample response

```
"http://cloud.seafile.com:8082/upload-api/73c5d117-3bcf-48a0-aa2a-3f48d5274ae3"
```

Errors

```
403 Permission denied.
500 Run out of quota
```

Upload File

After getting the upload link, POST to this link for uploading files.

POST http://cloud.seafile.com:8082/upload-api/73c5d117-3bcf-48a0-aa2a-3f48d5274ae3

Request parameters

- file: local file path.
- parent_dir : path in your Seafile repo that you want to upload local file to.
- relative_path: sub path of "parent_dir", if this sub path does not exist, Seafile will create it recursively.
- ret-json: returns a json array including file info if set to `1` .

> NOTE:
>
> 1. `parent_dir` must endswith `/`
> 2. `relative_path` must NOT startswith `/`

Sample request

upload file to `/path-in-seafile-repo/` :

```
curl -H "Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd" -F file=@local
-folder/test.txt -F parent_dir=/path-in-seafile-repo/ http://cloud.seafile.com:8082/up
load-api/73c5d117-3bcf-48a0-aa2a-3f48d5274ae3
```

Sample response for no `ret-json` parameter

```
"adc83b19e793491b1c6ea0fd8b46cd9f32e592fc"
```

upload file to `/path-in-seafile-repo/sub_path_1/sub_path_2/` , Seafile will create
`sub_path_1/sub_path_2/` recursively if it does not exist:

```
curl -H "Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd" -F file=@local
-folder/test.txt -F file=@1.jpg -F parent_dir=/path-in-seafile-repo/ -F relative_path=
sub_path_1/sub_path_2/ http://cloud.seafile.com:8082/upload-api/73c5d117-3bcf-48a0-aa2
a-3f48d5274ae3?ret-json=1
```

Sample response for with `?ret-json=1` parameter

```
[
    {
        "name": "test.txt",
        "id": "4ccd37916552e2943314027931edd0b45240be7c",
        "size": 2987
    },
    {
        "name": "1.jpg",
        "id": "12e07dd00c124fa7ea3b645ff9fe183f73eab2a1",
        "size": 1699246
    }
]
```

Note

- New uploaded file name will be 'test(1).text' if a file with name 'test.txt' already exists in parent directory

- For python client uploading, see https://github.com/haiwen/webapi-examples/blob/master/python/upload-file.py, or it can be done much more easily with elegant python requests library, see https://github.com/haiwen/webapi-

examples/blob/master/python/upload-file2.py

Errors

```
400 Bad request
440 Invalid filename
500 Internal server error
```

Update file

Get Update Link

GET https://cloud.seafile.com/api2/repos/{repo-id}/update-link/?p=/update-dir

Request parameters

- repo-id
- p (use '/' as default)

Sample request

```
curl -H "Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd" https://cloud.
seafile.com/api2/repos/99b758e6-91ab-4265-b705-925367374cf0/update-link/
```

Sample response

```
"http://cloud.seafile.com:8082/update-api/e69e5ee7-9329-4f42-bf1b-12879bd72c28"
```

Errors

```
403 Permission denied.
500 Run out of quota
```

Update File

After getting the update link, POST to this link for updating files.

POST http://cloud.seafile.com:8082/update-api/e69e5ee7-9329-4f42-bf1b-12879bd72c28

Request parameters

- target_file

Sample request

```
curl -H "Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd" -F file=@test.
txt -F filename=test.txt -F target_file=/test.txt http://cloud.seafile.com:8082/update
-api/e69e5ee7-9329-4f42-bf1b-12879bd72c28
```

Returns

The id of the updated file

Sample response

```
"adc83b19e793491b1c6ea0fd8b46cd9f32e592fc"
```

Errors

- 400 Bad request
- 440 Invalid filename
- 500 Internal server error

Get Upload Blocks Link

GET https://cloud.seafile.com/api2/repos/{repo-id}/upload-blks-link/

Request parameters

- repo-id

Sample request

```
curl -H "Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd" https://cloud.
seafile.com/api2/repos/99b758e6-91ab-4265-b705-925367374cf0/upload-blks-link/
```

Sample response

```
"https://cloud.seafile.com/seafhttp/upload-blks-api/569213db-7297-457a-907d-e2259a277c
05"
```

Errors

- 403 Can not access repo
- 520 above quota

Get Update Blocks Link

GET https://cloud.seafile.com/api2/repos/{repo-id}/update-blks-link/

Request parameters

- repo-id

Sample request

```
curl -H "Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd" https://cloud.
seafile.com/api2/repos/99b758e6-91ab-4265-b705-925367374cf0/update-blks-link/
```

Sample response

```
"https://cloud.seafile.com/seafhttp/update-blks-api/402c6d48-fe52-4592-97dd-85f462f03d
66"
```

Errors

- 403 Can not access repo
- 520 above quota

Directory

List Directory Entries

GET https://cloud.seafile.com/api2/repos/{repo-id}/dir/

- repo-id
- p (optional): The path to a directory. If `p` is missing, then defaults to '/' which is the top directory.
- oid (optional): The object id of the directory. The object id is the checksum of the directory contents.
- t (optional): If set `t` argument as `f` , will only return file entries, and `d` for only dir entries.
- recursive (optional): If set `t` argument as `d` **AND** `recursive` argument as `1` , return all dir entries recursively

Sample request

request file/dir list of a folder.

```
curl -H "Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d9b477fd" -H 'Accept: app
lication/json; indent=4' https://cloud.seafile.com/api2/repos/99b758e6-91ab-4265-b705-
925367374cf0/dir/?p=/foo
```

Sample response

If oid is the same as the current oid of the directory, returns `"uptodate"` , else returns

```
[
{
    "id": "0000000000000000000000000000000000000000",
    "type": "file",
    "name": "test1.c",
    "size": 0
},
{
    "id": "e4fe14c8cda2206bb9606907cf4fca6b30221cf9",
    "type": "dir",
    "name": "test_dir"
}
]
```

Sample request

request recursive dir list of a folder.

```
curl -H "Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d9b477fd" -H 'Accept: app
lication/json; indent=4' 'https://cloud.seafile.com/api2/repos/99b758e6-91ab-4265-b705
-925367374cf0/dir/?t=d&recursive=1'
```

Sample response

```
[{'id': u'5e307101cad46398fb5fe52d9177836f73c4bae8',
  'mtime': 1471490386,
  'name': u'123',
  'parent_dir': u'/video',
  'permission': u'rw',
  'type': 'dir'},
 {'id': u'0000000000000000000000000000000000000000',
  'mtime': 1471490391,
  'name': u'123-2',
  'parent_dir': u'/video',
  'permission': u'rw',
  'type': 'dir'},
 {'id': u'0000000000000000000000000000000000000000',
  'mtime': 1471490379,
  'name': u'456',
  'parent_dir': u'/video/123',
  'permission': u'rw',
  'type': 'dir'},
 {'id': u'0000000000000000000000000000000000000000',
  'mtime': 1471490386,
  'name': u'456-2',
  'parent_dir': u'/video/123',
  'permission': u'rw',
  'type': 'dir'},
 {'id': u'd8f5f80fbd89bf5634dcf9e21b569c487541d34e',
  'mtime': 1471490391,
  'name': u'video',
  'parent_dir': '/',
  'permission': u'rw',
  'type': 'dir'}
]
```

Errors

- 404 The path is not exist.
- 440 Repo is encrypted, and password is not provided.
- 520 Operation failed..

Create New Directory

POST https://cloud.seafile.com/api2/repos/{repo-id}/dir/

- repo-id
- p
- operation=mkdir (post)

Sample request

```
curl -d "operation=mkdir" -v -H 'Authorization: Token 076de58233c09f19e7a5179abff14ad5
5987350e' -H 'Accept: application/json; charset=utf-8; indent=4' https://cloud.seafile
.com/api2/repos/21b941c2-5411-4372-a514-00b62ab99ef2/dir/?p=/foo
```

Sample response

```
...
< HTTP/1.0 201 CREATED
< Location: https://cloud.seafile.com/api2/repos/dae8cecc-2359-4d33-aa42-01b7846c4b32/
dir/?p=/foo
...

"success"
```

Success

Response code 201(Created) is returned, and Location header provides the url of created directory.

Errors

- 400 Path is missing or invalid(e.g. p=/)
- 520 Operation failed.

Notes

Newly created directory will be renamed if the name is duplicated.

Rename Directory

POST https://cloud.seafile.com/api2/repos/{repo-id}/dir/?p=/foo

Parameters

- repo-id
- p (path)
- operation=rename
- newname (the new name of the directory)

Sample request

```
curl -d  "operation=rename&newname=pinkfloyd_newfolder" -v  -H 'Authorization: Tokacd9
c6ccb8133606d94ff8e61d99b477fd' -H 'Accept: application/json; charset=utf-8; indent=4'
 https://cloud.seafile.com/api2/repos/dae8cecc-2359-4d33-aa42-01b7846c4b32/dir/?p=/foo
```

Success

Response code 200 if everything is ok

Errors

- 403 if You do not have permission to rename a folder
- 400 if newname is not given

- 520 if Failed to rename directory (generic problem)

Notes

If the new name is the same of the old name no operation will be done.

Delete Directory

DELETE https://cloud.seafile.com/api2/repos/{repo-id}/dir/

- repo-id
- p

Sample request

```
curl -X DELETE -v  -H 'Authorization: Token f2210dacd3606d94ff8e61d99b477fd' -H 'Accep
t: application/json; charset=utf-8; indent=4' https://cloud.seafile.com/api2/repos/dae
8cecc-2359-4d33-aa42-01b7846c4b32/dir/?p=/foo
```

Sample response

```
...
< HTTP/1.0 200 OK
...
"success"
```

Success

Response code is 200(OK), and a string `"success"` is returned.

Errors

- 400 Path is missing or invalid(e.g. p=/)
- 520 Operation failed.

Note

This can also be used to delete file.

Download Directory

Perform the following two steps to download directory

Get Task Token

GET https://cloud.seafile.com/api/v2.1/repos/{repo-id}/zip-task/?parent_dir={parent_dir}&dirents={dir}

- repo-id

- parent_dir
- dirents

Sample request

```
curl -H 'Authorization: Token 0eb24ce5db35a31f70171eca2f760f03f59fa09a' -H 'Accept: ap
plication/json; charset=utf-8; indent=4' "https://cloud.seafile.com/api/v2.1/repos/746
0f7ac-a0ff-4585-8906-bb5a57d2e118/zip-task/?parent_dir=/&dirents=my_dir_name"
```

Sample response

```
{
    "zip_token": "b2272645-35ee-44ce-8f68-07c022107015"
}
```

Errors

- 400 parent_dir/dirents invalid.
- 400 Unable to download directory: size is too large.
- 404 Library/Folder not found.
- 403 Permission denied.
- 500 Internal Server Error

Revert Directory

PUT https://cloud.seafile.com/api2/repos/7460f7ac-a0ff-4585-8906-bb5a57d2e118/dir/revert/

- repo_id
- p
- commit_id

Sample request

```
curl -X PUT -d "p=/456&commit_id=b1a33768517f65ac7d618ff078dd27855374c7e0" -H 'Authori
zation: Token 0eb24ce5db35a31f70171eca2f760f03f59fa09a' -H 'Accept: application/json;
charset=utf-8; indent=4' "https://cloud.seafile.com/api2/repos/7460f7ac-a0ff-4585-8906
-bb5a57d2e118/dir/revert/"
```

Sample response

```
{
    "success": true
}
```

Errors

- 400 path invalid.

- 400 commit_id invalid.
- 404 Library/Folder not found.
- 403 Permission denied.
- 500 Internal Server Error

Query Task Progress

Use the token returned from previous request to check if task progress finished.

GET https://cloud.seafile.com/api/v2.1/query-zip-progress/?token={token}

- token

Sample request

```
curl -H 'Authorization: Token 0eb24ce5db35a31f70171eca2f760f03f59fa09a' -H 'Accept: ap
plication/json; charset=utf-8; indent=4' "https://cloud.seafile.com/api/v2.1/query-zip
-progress/?token=b2272645-35ee-44ce-8f68-07c022107015"
```

Sample response

If `zipped` is equal to `total` , means task finished.

```
{
    "zipped":2,
    "total":2
}
```

Errors

- 400 token invalid.
- 500 Internal Server Error

After the task finished, you can manually generate directory download url with the `zip_token` :

```
FILE_SERVER_ROOT/zip/{zip_token}
```

For example, `https://cloud.seafile.com/seafhttp/zip/b2272645-35ee-44ce-8f68-07c022107015` is the final url here.

Asynchronously Copy/Move File/Directory

Get Task Id

POST https://cloud.seafile.com/api/v2.1/copy-move-task/

Request parameters

- src_repo_id
- src_parent_dir
- src_dirent_name
- dst_repo_id
- dst_parent_dir
- operation, `copy` or `move`
- dirent_type, `file` or `dir`

Sample request

Sample for copy file.

```
curl -d "src_repo_id=534258e2-761b-465c-9e2c-56e021d3853f&src_parent_dir=/&src_dirent_
name=file.md&dst_repo_id=a3fa768d-0f00-4343-8b8d-07b4077881db&dst_parent_dir=/&operati
on=copy&dirent_type=file" -H 'Authorization: Token ae265ae599a29c238ca25fb63087859798d
5f55d' -H 'Accept: application/json; charset=utf-8; indent=4' 'http://192.168.1.124:80
00/api/v2.1/copy-move-task/'
```

Sample response

```
{
    "task_id": "d1ca2b8c-8ab8-4dd4-8ad7-842130764484"
}
```

Errors

- 400 path/operation/dirent_type invalid.
- 404 Library/Folder not found.
- 403 Permission denied.
- 500 Internal Server Error

Cancel Task

DELETE https://cloud.seafile.com/api/v2.1/copy-move-task/

Request parameters

- task_id

Sample request

```
curl -X DELETE -d "task_id=d1ca2b8c-8ab8-4dd4-8ad7-842130764484" -H 'Authorization: To
ken ae265ae599a29c238ca25fb63087859798d5f55d' -H 'Accept: application/json; charset=ut
f-8; indent=4' 'http://192.168.1.124:8000/api/v2.1/copy-move-task/'
```

Sample response

```
{
    "success": true
}
```

Errors

- 400 task_id invalid.
- 500 Internal Server Error

Query Progress

GET https://cloud.seafile.com/api/v2.1/query-copy-move-progress/

Request parameters

- task_id

Sample request

```
curl -H 'Authorization: Token ae265ae599a29c238ca25fb63087859798d5f55d' -H 'Accept: ap
plication/json; charset=utf-8; indent=4' 'http://192.168.1.124:8000/api/v2.1/query-cop
y-move-progress/?task_id=d1ca2b8c-8ab8-4dd4-8ad7-842130764484'
```

Sample response

```
{
    "successful": true,
    "canceled": false,
    "total": 1,
    "done": 1,
    "failed": false
}
```

Errors

- 400 task_id invalid.
- 500 Internal Server Error

Multiple Files / Directories

Copy

POST https://cloud.seafile.com/api2/repos/{repo_id}/fileops/copy/

Request parameters

- p: source folder path, defaults to `"/"`
- file_names: list of file/folder names to copy. Multiple file/folder names can be seperated by `:` .
- dst_repo: the destination repo id
- dst_dir: the destination folder in `dst_repo`

Sample request

```
curl -d "dst_repo=bdf816e6-aba8-468c-962f-77c2fcfd1d1c&dst_dir=/1&file_names=1.md:2.md
:test" -H 'Authorization: Token cbd7705c06846425ed5c46ae0313d5b098d24154' -H 'Accept:
application/json; indent=4' "https://cloud.seafile.com/api2/repos/bdf816e6-aba8-468c-9
62f-77c2fcfd1d1c/fileops/copy/?p=/1/test-2"
```

Sample response

```
[
    {
        "repo_id": "bdf816e6-aba8-468c-962f-77c2fcfd1d1c",
        "parent_dir": "/1",
        "obj_name": "1 (2).md"
    },
    {
        "repo_id": "bdf816e6-aba8-468c-962f-77c2fcfd1d1c",
        "parent_dir": "/1",
        "obj_name": "2 (2).md"
    },
    {
        "repo_id": "bdf816e6-aba8-468c-962f-77c2fcfd1d1c",
        "parent_dir": "/1",
        "obj_name": "test (2)"
    }
]
```

Errors

- 400 missing argument
- 403 You do not have permission to copy file
- 404 repo not found
- 502 failed to copy file

Move

POST https://cloud.seafile.com/api2/repos/{repo_id}/fileops/move/

Request parameters

- p: source folder path, defaults to `"/"`
- file_names: list of file/folder names to move. Multiple file/folder names can be seperated by `:` .

- dst_repo: the destination repo id
- dst_dir: the destination folder in `dst_repo`

Sample request

```
curl -d "dst_repo=bdf816e6-aba8-468c-962f-77c2fcfd1d1c&dst_dir=/1&file_names=1.md:2.md
:test" -H 'Authorization: Token cbd7705c06846425ed5c46ae0313d5b098d24154' -H 'Accept:
application/json; indent=4' "https://cloud.seafile.com/api2/repos/bdf816e6-aba8-468c-9
62f-77c2fcfd1d1c/fileops/move/?p=/1/test-2"
```

Sample response

```
[
    {
        "repo_id": "bdf816e6-aba8-468c-962f-77c2fcfd1d1c",
        "parent_dir": "/1",
        "obj_name": "1 (3).md"
    },
    {
        "repo_id": "bdf816e6-aba8-468c-962f-77c2fcfd1d1c",
        "parent_dir": "/1",
        "obj_name": "2 (3).md"
    },
    {
        "repo_id": "bdf816e6-aba8-468c-962f-77c2fcfd1d1c",
        "parent_dir": "/1",
        "obj_name": "test (3)"
    }
]
```

Errors

- 400 missing argument
- 403 You do not have permission to move file
- 404 repo not found
- 502 failed to move file

Delete

POST https://cloud.seafile.com/api2/repos/{repo_id}/fileops/delete/

Request parameters

- p: source folder path, defaults to `"/"`
- file_names: list of file/folder names to delete. Multiple file/folder names can be seperated by `:` .

Sample request

```
curl -d "file_names=foo.c:bar.c:dir1:dir2" -H 'Authorization: Token f2210dacd9c6ccb813
3606d94ff8e61d99b477fd' https://cloud.seafile.com/api2/repos/c7436518-5f46-4296-97db-2
fcba4c8c8db/fileops/delete/?p=src_path
```

Sample response

```
"success"
```

Errors

- 400 missing argument
- 403 You do not have permission to delete file
- 404 repo not found
- 502 failed to delete file

Download

Perform the following two steps to download multiple files and directories.

Get Task Token

GET https://cloud.seafile.com/api/v2.1/repos/{repo-id}/zip-task/?parent_dir={parent_dir}&dirents={dir,file}

- repo-id
- parent_dir
- dirents

Sample request

```
curl -H 'Authorization: Token 0eb24ce5db35a31f70171eca2f760f03f59fa09a' -H 'Accept: ap
plication/json; charset=utf-8; indent=4' "https://cloud.seafile.com/api/v2.1/repos/746
0f7ac-a0ff-4585-8906-bb5a57d2e118/zip-task/?parent_dir=/&dirents=my_dir_name&dirents=m
y_file_name"
```

Sample response

```
{
    "zip_token": "b2272645-35ee-44ce-8f68-07c022107015"
}
```

Errors

- 400 parent_dir/dirents invalid.
- 400 Unable to download directory: size is too large.
- 404 Library/Folder not found.

- 403 Permission denied.
- 500 Internal Server Error

Query Task Progress

Use the token returned from previous request to check if task progress finished.

GET https://cloud.seafile.com/api/v2.1/query-zip-progress/?token={token}

- token

Sample request

```
curl -H 'Authorization: Token 0eb24ce5db35a31f70171eca2f760f03f59fa09a' -H 'Accept: ap
plication/json; charset=utf-8; indent=4' "https://cloud.seafile.com/api/v2.1/query-zip
-progress/?token=b2272645-35ee-44ce-8f68-07c022107015"
```

Sample response

If `zipped` is equal to `total` , means task finished.

```
{
    "zipped":2,
    "total":2
}
```

Errors

- 400 token invalid.
- 500 Internal Server Error

After the task finished, you can manually generate directory download url with the `zip_token` :

```
FILE_SERVER_ROOT/zip/{zip_token}
```

For example, `https://cloud.seafile.com/seafhttp/zip/b2272645-35ee-44ce-8f68-07c022107015` is the final url here.

Avatar

Update User Avatar

POST https://cloud.seafile.com/api/v2.1/user-avatar/

Request parameters

- `avatar` : image file

Sample request

```
curl -H "Authorization: Token cbd7705c06846425ed5c46ae0313d5b098d24154" -F "avatar=@1.
jpg" https://cloud.seafile.com/api/v2.1/user-avatar/
```

Sample response

```
{"success": true}
```

Errors

- 400 invalid file extension
- 400 file is too big
- 500 Internal Server Error

Get User Avatar

GET https://cloud.seafile.com/api2/avatars/user/{user}/resized/{size}/

Request parameters

- user
- size

Sample request

```
curl -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd' "https://cloud
.seafile.com/api2/avatars/user/user@example.com/resized/80/"
```

Sample response

```
{
    "url": "http://127.0.0.1:8000/media/avatars/default.png",
    "is_default": true,
    "mtime": 0
}
```

Get Group Avatar

GET https://cloud.seafile.com/api2/avatars/group/{group_id}/resized/{size}/

Request parameters

- group_id
- size

Sample request

```
curl -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd' "https://cloud
.seafile.com/api2/avatars/group/1/resized/80/"
```

Sample response

```
{
    "url": "http://127.0.0.1:8000/media/avatars/groups/default.png",
    "is_default": true,
    "mtime": 0
}
```

Devices

Get User Devices

GET https://cloud.seafile.com/api2/devices/

Sample request

```
curl -H "Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd" -H 'Accept: ap
plication/json; indent=4' https://cloud.seafile.com/api2/devices/
```

Sample response

```
[
    {
        "synced_repos": [
            {
                "repo_id": "47945b31-dedb-4b92-a048-32bf825595ce",
                "sync_time": 1458008928,
                "repo_name": "wopi"
            },
            {
                "repo_id": "78c620ee-2989-4427-8eff-7748f4fbebc0",
                "sync_time": 1457943466,
                "repo_name": "lib-of-lian"
            }
        ],
        "last_accessed": "2016-03-15T10:28:48+08:00",
        "device_name": "lian",
        "platform_version": "",
        "platform": "linux",
        "user": "lian@lian.com",
        "key": "99abe1a7cc7d614db0bfa19db81e42ef675abe4f",
        "client_version": "5.0.0",
        "last_login_ip": "192.168.1.16",
        "device_id": "be10980211752515053bf9036a13139375de0cc8"
    },
    {
        "last_accessed": "2016-03-15T13:59:51+08:00",
        "device_name": "PLK-AL10",
        "platform_version": "5.0.2",
        "platform": "android",
        "user": "lian@lian.com",
        "key": "067051c94163ed193f2131d48c61882daa7cb238",
        "client_version": "2.0.3",
        "last_login_ip": "192.168.1.208",
        "device_id": "4a0d62c1f27b3b74"
    }
]
```

Errors

- 401 UNAUTHORIZED

Unlink User Device

DELETE https://cloud.seafile.com/api2/devices/

Request parameters

- platform
- device_id

Sample request

```
curl -X DELETE -d "platform=linux&device_id=be10980211752515053bf9036a13139375de0cc8"
-H "Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd" -H 'Accept: applica
tion/json; indent=4' https://cloud.seafile.com/api2/devices/
```

Sample response

```
{"success": true}
```

Errors

- 400 platform invalid
- 400 device_id invalid
- 500 Internal Server Error

Snapshot Label

Get Snapshot Label

GET https://cloud.seafile.com/api/v2.1/revision-tags/tag-names/

Sample request

Sample for get snapshot label

```
curl -H 'Authorization: Token 88aaa1e6fe35d0444868b4c67f8ca1766cf82f55' -H 'Accept: ap
plication/json; indent=4' http://cloud.seafile.com/api/v2.1/revision-tags/tag-names/
```

Sample response

```
[
    "q1",
    "qwe",
    "qwe",
    "qwe_-.12",
    "qwe_-1.",
    "r",
    "r",
    "v3",
    "\u4e2d\u6587",
    "\u82f1\u6587"
]
```

Create New Snapshot Label

POST https://cloud.seafile.com/api/v2.1/revision-tags/tagged-items/

Request parameters

- repo_id
- commit_id, optional
- tag_names

Sample request

Sample for create snapshot label.

```
curl -d "repo_id=7377c95d-b303-4914-a555-306651cc4cbf&commit_id=4c03938da11e83d6c1d3e8
ff469e92f46a80eeaf&tag_names=v2.1,v2.2" -H 'Authorization: Token 88aaa1e6fe35d0444868b
4c67f8ca1766cf82f55' -H 'Accept: application/json; indent=4' http://cloud.seafile.com/
api/v2.1/revision-tags/tagged-items/
```

Sample response

```
{
    "revisionTags": [
        {
            "tag": "v2.1",
            "tag_creator": "foo@foo.com",
            "revision": {
                "commit_id": "4c03938da11e83d6c1d3e8ff469e92f46a80eeaf",
                "repo_id": "7377c95d-b303-4914-a555-306651cc4cbf",
                "contact_email": "foo@foo.com",
                "name": "foo",
                "time": "2017-09-13T15:20:54+08:00",
                "link": "/repo/history/view/7377c95d-b303-4914-a555-306651cc4cbf/?comm
it_id=4c03938da11e83d6c1d3e8ff469e92f46a80eeaf",
                "email": "foo@foo.com",
                "description": "Added \"ca (1).js\"."
            }
        },
        {
            "tag": "v2.2",
            "tag_creator": "foo@foo.com",
            "revision": {
                "commit_id": "4c03938da11e83d6c1d3e8ff469e92f46a80eeaf",
                "repo_id": "7377c95d-b303-4914-a555-306651cc4cbf",
                "contact_email": "foo@foo.com",
                "name": "foo",
                "time": "2017-09-13T15:20:54+08:00",
                "link": "/repo/history/view/7377c95d-b303-4914-a555-306651cc4cbf/?comm
it_id=4c03938da11e83d6c1d3e8ff469e92f46a80eeaf",
                "email": "foo@foo.com",
                "description": "Added \"ca (1).js\"."
            }
        }
    ]
}
```

Errors

- 400 repo_id/commit_id/tag_names invalid.
- 403 Permission denied(need rw permission).

Update Snapshot Label

PUT https://cloud.seafile.com/api/v2.1/revision-tags/tagged-items/

Request parameters

- repo_id
- commit_id(default is head commit if commit_id is empty)
- tag_names

Sample request

Sample for update snapshot label.

```
curl -X PUT -d "repo_id=7377c95d-b303-4914-a555-306651cc4cbf&commit_id=4c03938da11e83d
6c1d3e8ff469e92f46a80eeaf&tag_names=v3" -H 'Authorization: Token 88aaa1e6fe35d0444868b
4c67f8ca1766cf82f55' -H 'Accept: application/json; indent=4' http://cloud.seafile.com/
api/v2.1/revision-tags/tagged-items/
```

Sample response

```
{
    "revisionTags": [
        {
            "tag": "v3",
            "tag_creator": "foo@foo.com",
            "revision": {
                "commit_id": "4c03938da11e83d6c1d3e8ff469e92f46a80eeaf",
                "repo_id": "7377c95d-b303-4914-a555-306651cc4cbf",
                "contact_email": "foo@foo.com",
                "name": "foo",
                "time": "2017-09-13T15:20:54+08:00",
                "link": "/repo/history/view/7377c95d-b303-4914-a555-306651cc4cbf/?comm
it_id=4c03938da11e83d6c1d3e8ff469e92f46a80eeaf",
                "email": "foo@foo.com",
                "description": "Added \"ca (1).js\".."
            }
        }
    ]
}
```

Errors

- 400 repo_id/commit_id/tag_names invalid.
- 403 Permission denied(need rw permission).

Get File Activities

GET https://cloud.seafile.com/api2/events/

Request parameters

this api will only return first 15 records of activities. if want get more, pass `start` parameter

- start (default 0)
- size (size of user avatar, default 36)

Sample request

```
curl -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd' "https://cloud
.seafile.com/api2/events/"
```

Sample response

```
{'events': [{'author': u'lian@lian.com',
             'avatar': '<img src="/media/avatars/default.png" width="36" height="36" c
lass="avatar" />',
             'avatar_url': 'https://cloud.seafile.com/media/avatars/default.png',
             'date': '2016-05-06',
             'etype': u'repo-delete',
             'name': u'lian',
             'nick': u'lian',
             'repo_id': u'13e2ae06-8927-465b-8f57-319b3a7cfbdd',
             'repo_name': u'2',
             'time': 1462552942,
             'time_relative': u'<time datetime="2016-05-06T16:42:22.967104" is="relati
ve-time" title="Fri, 6 May 2016 16:42:22 +0800" >19 hours ago</time>'},
            {'author': u'lian@lian.com',
             'avatar': '<img src="/media/avatars/default.png" width="36" height="36" c
lass="avatar" />',
             'avatar_url': 'https://cloud.seafile.com/media/avatars/default.png',
             'commit_id': u'1be92d40a1b526863bbf39e8abdae7d317a1195f',
             'converted_cmmt_desc': u'Modified "<a href="/convert_cmmt_desc_link/?repo
_id=47945b31-dedb-4b92-a048-32bf825595ce&cmmt_id=1be92d40a1b526863bbf39e8abdae7d317a11
95f&nm=excel-view.xlsx" class="normal">excel-view.xlsx</a>"',
             'date': '2016-04-25',
             'desc': u'Modified "excel-view.xlsx"',
             'etype': u'repo-update',
             'more_files': False,
             'name': u'lian',
             'nick': u'lian',
             'repo_encrypted': False,
             'repo_id': u'47945b31-dedb-4b92-a048-32bf825595ce',
             'repo_name': u'wopi',
             'time': 1461569125,
             'time_relative': u'<time datetime="2016-04-25T15:25:25" is="relative-time
" title="Mon, 25 Apr 2016 15:25:25 +0800" >11 days ago</time>'}
             ...
            ],
 'more': True,
 'more_offset': 15}
```

Sample request for more activities

```
curl -H 'Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd' "https://cloud
.seafile.com/api2/events/?start=15"
```

Sample response for more activities

```
{'events': [{'author': u'lian@lian.com',
             'avatar': '<img src="/media/avatars/default.png" width="36" height="36" c
lass="avatar" />',
             'avatar_url': 'https://cloud.seafile.com/media/avatars/default.png',
             'date': '2016-05-06',
             'etype': u'repo-delete',
             'name': u'lian',
             'nick': u'lian',
             'repo_id': u'13e2ae06-8927-465b-8f57-319b3a7cfbdd',
             'repo_name': u'2',
             'time': 1462552942,
             'time_relative': u'<time datetime="2016-05-06T16:42:22.967104" is="relati
ve-time" title="Fri, 6 May 2016 16:42:22 +0800" >19 hours ago</time>'},
            {'author': u'lian@lian.com',
             'avatar': '<img src="/media/avatars/default.png" width="36" height="36" c
lass="avatar" />',
             'avatar_url': 'https://cloud.seafile.com/media/avatars/default.png',
             'commit_id': u'1be92d40a1b526863bbf39e8abdae7d317a1195f',
             'converted_cmmt_desc': u'Modified "<a href="/convert_cmmt_desc_link/?repo
_id=47945b31-dedb-4b92-a048-32bf825595ce&cmmt_id=1be92d40a1b526863bbf39e8abdae7d317a11
95f&nm=excel-view.xlsx" class="normal">excel-view.xlsx</a>"',
             'date': '2016-04-25',
             'desc': u'Modified "excel-view.xlsx"',
             'etype': u'repo-update',
             'more_files': False,
             'name': u'lian',
             'nick': u'lian',
             'repo_encrypted': False,
             'repo_id': u'47945b31-dedb-4b92-a048-32bf825595ce',
             'repo_name': u'wopi',
             'time': 1461569125,
             'time_relative': u'<time datetime="2016-04-25T15:25:25" is="relative-time
" title="Mon, 25 Apr 2016 15:25:25 +0800" >11 days ago</time>'}
             ...
             ],
 'more': True,
 'more_offset': 30}
```

Get Thumbnail Image

GET https://cloud.seafile.com/api2/repos/{repo_id}/thumbnail/

Request parameters

- repo_id
- p
- size

Sample request

```
curl -H 'Authorization: Token 40f9a510a0629430865dc199a3880898ad2e48fc' https://cloud.
seafile.com/api2/repos/fbead5d0-4817-4446-92f3-7ac8e6a8e5f5/thumbnail/?p=/5.jpg\&size=
123 > thumbnail.png
```

Search User

GET https://cloud.seafile.com/api2/search-user/?q=foo

Request parameters

- q

Sample request

```
curl -H "Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd" -H 'Accept: ap
plication/json; indent=4' https://cloud.seafile.com/api2/search-user/?q=foo
```

Sample response

```
[
    {'avatar_url': 'https://cloud.seafile.com/media/avatars/default.png',
     'contact_email': u'foo@foo.com',
     'email': u'foo@foo.com',
     'name': 'foo'},
    {'avatar_url': 'https://cloud.seafile.com/media/avatars/default.png',
     'contact_email': u'foo-bar@foo-bar.com',
     'email': u'foo-bar@foo-bar.com',
     'name': 'foo-bar'}
]
```

Errors

- 400 Argument missing.
- 403 Guest user can not use global address book.

Note: The following APIs are only available since Seafile v5.1.

Admin Only

Account

List Accounts

GET https://cloud.seafile.com/api2/accounts/

Request parameters

- start (default to 0)
- limit (default to 100)
- scope (default None, accepted values: 'LDAP' or 'DB' or 'LDAPImport')

To retrieve all users, just set both `start` and `limit` to `-1`.

If scope parameter is passed then accounts will be searched inside the specific scope, otherwise it will be used the old approach: first LDAP and, if no account is found, DB.

Sample request

```
curl -H "Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd" -H 'Accept: ap
plication/json; indent=4' https://cloud.seafile.com/api2/accounts/
```

Sample response

```
[
{
    "email": "foo@foo.com"
},
{
    "email": "bar@bar.com"
}
]
```

Errors

- 403 Permission error, only administrator can perform this action

Get Account Info

GET https://cloud.seafile.com/api2/accounts/{email}/

Request parameters

Sample request

```
curl -v -H "Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd" -H 'Accept:
 application/json; indent=4' https://cloud.seafile.com/api2/accounts/user@mail.com/
```

Sample response

```
{
"is_staff": false,
"is_active": true,
"id": 2,
"create_time": 1356061187741686,
"usage": 651463187,
"total": 107374182400,
"email": "user@mail.com"
}
```

Errors

- 403 Permission error, only administrator can perform this action

Create Account

PUT https://cloud.seafile.com/api2/accounts/{email}/

Request parameters

- password
- is_staff (defaults to False)
- is_active (defaults to True)

Sample request

```
curl -v -X PUT -d "password=123456" -H "Authorization: Token f2210dacd9c6ccb8133606d94
ff8e61d99b477fd" -H 'Accept: application/json; indent=4' https://cloud.seafile.com/api
2/accounts/newaccount@gmail.com/
```

Sample response

```
...
< HTTP/1.0 201 CREATED
< Location: https://cloud.seafile.com/api2/accounts/newaccount@gmail.com/
...

"success"
```

Success

```
Response code 201(Created) is returned and the Location header provides shared link.
```

Errors

- 403 Permission error, only administrator can perform this action

Update Account

PUT https://cloud.seafile.com/api2/accounts/{email}/

Request parameters

At least one of followings:

- password
- is_staff
- is_active
- name
- note
- storage, the unit is MB.

Sample request

```
curl -v -X PUT -d "password=654321&is_staff=true&storage=100" -H "Authorization: Token
 f2210dacd9c6ccb8133606d94ff8e61d99b477fd" -H 'Accept: application/json; indent=4' htt
ps://cloud.seafile.com/api2/accounts/user@mail.com/
```

Sample response

```
...
< HTTP/1.0 200 OK
...

"success"
```

Success

```
Response code 200(OK) is returned.
```

Errors

- 400 Bad Request, keyword password is required
- 403 Permission error, only administrator can perform this action

Migrate Account

POST https://cloud.seafile.com/api2/accounts/{email}/

Request parameters

- op
- to_user this user must exist

Sample request

```
curl -v -d "op=migrate&to_user=user2@mail.com" -H "Authorization: Token f2210dacd9c6cc
b8133606d94ff8e61d99b477fd" -H 'Accept: application/json; indent=4' https://cloud.seaf
ile.com/api2/accounts/user@mail.com/
```

Sample response

```
...
< HTTP/1.0 200 OK
...

"success"
```

Success

```
Response code 200(OK) is returned.
```

Errors

- 400 Bad Request, arguments are missing or invalid
- 403 Permission error, only administrator can perform this action

Delete Account

DELETE https://cloud.seafile.com/api2/accounts/{email}/

Sample request

```
curl -v -X DELETE -H "Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd" -
H 'Accept: application/json; indent=4' https://cloud.seafile.com/api2/accounts/newacco
unt@gmail.com/
```

Sample response

```
"success"
```

Errors

- 403 Permission error, only administrator can perform this action

Devices

Get Desktop Devices

Get first page (50 records per page) of desktop devices.

GET https://cloud.seafile.com/api/v2.1/admin/devices/?
platform=desktop&page=1&per_page=50

Sample request

```
curl -H "Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd" -H 'Accept: ap
plication/json; indent=4' https://cloud.seafile.com/api/v2.1/admin/devices/?platform=d
esktop&page=1&per_page=50
```

Sample response

```
[
    {'has_next_page': False},
    [
        {
            'last_accessed': '2016-04-11T18:24:29+08:00',
            'last_login_ip': u'192.168.1.210',
            'platform': u'linux',
            'user': u'1@1.com',
            'client_version': u'2.0.4',
            'device_name': u'PLK-AL10',
            'device_id': u'4a0d62c1f27b3b74'
        }
    ]
]
```

Errors

- 403 Permission error, only administrator can perform this action

Get Mobile Devices

Get first page (50 records per page) of mobile devices.

GET https://cloud.seafile.com/api/v2.1/admin/devices/?
platform=mobile&page=1&per_page=50

Sample request

```
curl -H "Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd" -H 'Accept: ap
plication/json; indent=4' https://cloud.seafile.com/api/v2.1/admin/devices/?platform=m
obile&page=1&per_page=50
```

Sample response

```
[
    {'has_next_page': False},
    [
        {
            'last_accessed': '2016-04-11T18:24:29+08:00',
            'last_login_ip': u'192.168.1.210',
            'platform': u'ios',
            'user': u'1@1.com',
            'client_version': u'2.0.4',
            'device_name': u'PLK-AL10',
            'device_id': u'4a0d62c1f27b3b74'
        }
    ]
]
```

Errors

- 403 Permission error, only administrator can perform this action

Unlink User Device

DELETE https://cloud.seafile.com/api/v2.1/admin/devices/

Request parameters

- platform
- device_id
- user

Sample request

```
curl -X DELETE -d "platform=linux&device_id=be10980211752515053bf9036a13139375de0cc8&u
ser=1@1.com" -H "Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd" -H 'Ac
cept: application/json; indent=4' https://cloud.seafile.com/api/v2.1/admin/devices/
```

Sample response

```
{"success": true}
```

Errors

- 400 platform invalid
- 400 device_id invalid
- 400 user invalid
- 500 Internal Server Error

Get Device Errors

This api is only supported in pro edition.

GET https://cloud.seafile.com/api/v2.1/admin/device-errors/

Sample request

```
curl -H "Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd" -H 'Accept: ap
plication/json; indent=4' https://cloud.seafile.com/api/v2.1/admin/device-errors/
```

Sample response

```
[
    {
        'repo_id': u'47945b31-dedb-4b92-a048-32bf825595ce',
        'device_ip': u'192.168.1.124',
        'error_time': '2016-04-13T17:49:11+08:00',
        'device_name': u'lian-ubuntu-1404-64',
        'email': u'1@1.com',
        'client_version': u'5.0.6',
        'error_msg': u'No permission.',
        'repo_name': u'wopi'
    }
]
```

Errors

- 403 Feature disabled.
- 500 Internal Server Error

Clean Device Errors

This api is only supported in pro edition.

DELETE https://cloud.seafile.com/api/v2.1/admin/device-errors/

Sample request

```
curl -X DELETE -H "Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd" -H '
Accept: application/json; indent=4' https://cloud.seafile.com/api/v2.1/admin/device-er
rors/
```

Sample response

```
{"success":true}
```

Errors

- 403 Feature disabled.

- 500 Internal Server Error

Get Snapshots by Label

GET https://cloud.seafile.com/api/v2.1/admin/revision-tags/tagged-items/

Request parameters

- user, optional
- repo_id, optional
- tag_name, optional
- tag_contains, optional

Sample request

Sample for get snapshots by label

```
curl -H 'Authorization: Token 88aaa1e6fe35d0444868b4c67f8ca1766cf82f55' -H 'Accept: ap
plication/json; indent=4' http://cloud.seafile.com/api/v2.1/admin/revision-tags/tagged
-items/?repo_id=7377c95d-b303-4914-a555-306651cc4cbf&tag_contains=v
```

Sample response

```
[
    {
        "tag": "v3",
        "tag_creator": "foo@foo.com",
        "revision": {
            "commit_id": "4c03938da11e83d6c1d3e8ff469e92f46a80eeaf",
            "repo_id": "7377c95d-b303-4914-a555-306651cc4cbf",
            "contact_email": "foo@foo.com",
            "name": "foo",
            "time": "2017-09-13T15:20:54+08:00",
            "link": "/repo/history/view/7377c95d-b303-4914-a555-306651cc4cbf/?commit_i
d=4c03938da11e83d6c1d3e8ff469e92f46a80eeaf",
            "email": "foo@foo.com",
            "description": "Added \"ca (1).js\"."
        }
    }
]
```

Default Library

Get User Default Library

Available for Seafile v6.0.9+

GET https://cloud.seafile.com/api/v2.1/admin/default-library/{user_email}

Sample request

```
curl -H 'Authorization: Token 024692f8411a656baa2cc2d5ed4cd46177b3b3d0' "https://cloud
.seafile.com/api/v2.1/admin/default-library/?user_email=foo@foo.com"
```

Sample response

```
{
    "repo_id":"9e58655f-d2a2-4df9-baa2-5ca50698ad98",
    "exists":true,
    "user_email":"lian@lian.com"
}
```

Errors

- 400 user_email invalid.
- 404 User not found.
- 403 Permission error, only administrator can perform this action.
- 500 Internal Server Error

Create User Default Library

Available for Seafile v6.0.9+

POST https://cloud.seafile.com/api/v2.1/admin/default-library/

Sample request

```
curl -d "user_email=foo@foo.com" -H 'Authorization: Token 024692f8411a656baa2cc2d5ed4c
d46177b3b3d0' "https://cloud.seafile.com/api/v2.1/admin/default-library/"
```

Sample response

```
{
    "repo_id":"9e58655f-d2a2-4df9-baa2-5ca50698ad98",
    "exists":true,
    "user_email":"lian@lian.com"
}
```

Errors

- 400 user_email invalid.
- 403 Permission error, only administrator can perform this action.
- 403 Permission error, user can not create library.
- 404 User not found.

- 500 Internal Server Error

Libraries

Get all Libraries

Available for Seafile v6.0.0+

GET https://cloud.seafile.com/api/v2.1/admin/libraries/?page=1&per_page=100

Get first page (100 records per page) of libraries.

Sample request

```
curl -H "Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd" -H 'Accept: ap
plication/json; indent=4' https://cloud.seafile.com/api/v2.1/admin/libraries/?page=1&p
er_page=100
```

Sample response

```
{
    "page_info": {
        "current_page": 1,
        "has_next_page": true
    },
    "repos": [
        {
            "name": null,
            "encrypted": false,
            "file_count": 0,
            "owner": "lian@lian.com",
            "size_formatted": "0 bytes",
            "id": "04df5005-1dfc-4e30-ae55-95ed6559583f",
            "size": 0
        },
        {
            "name": "My Library",
            "encrypted": false,
            "file_count": 161,
            "owner": "lian@lian.com",
            "size_formatted": "25.4 MB",
            "id": "2deffbac-d7be-4ace-b406-efb799083ee9",
            "size": 26617460
        }
        ...
    ]
}
```

Errors

- 403 Permission error, only administrator can perform this action

Search Library by Name

Available for Seafile v6.0.0+

GET https://cloud.seafile.com/api/v2.1/admin/libraries/?name=file

Request parameters

- name

Sample request

```
curl -H "Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd" -H 'Accept: ap
plication/json; indent=4' https://cloud.seafile.com/api/v2.1/admin/libraries/?name=fil
e
```

Sample response

```
{
    "owner": "",
    "repos": [
        {
            "name": "file-preview",
            "encrypted": false,
            "file_count": 25,
            "owner": "lian@lian.com",
            "size_formatted": "10.9 MB",
            "id": "6ce1383b-ed1c-45c7-ab31-a13b64471e64",
            "size": 11437897
        }
    ],
    "name": "file"
}
```

Errors

- 403 Permission error, only administrator can perform this action

Search Library by Owner

Available for Seafile v6.0.0+

GET https://cloud.seafile.com/api/v2.1/admin/libraries/?owner=lian@lian.com

Request parameters

- owner

Sample request

```
curl -H "Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd" -H 'Accept: ap
plication/json; indent=4' https://cloud.seafile.com/api/v2.1/admin/libraries/?owner=li
an@lian.com
```

Sample response

```json
{
    "owner": "lian@lian.com",
    "repos": [
        {
            "name": "lib-of-lian",
            "encrypted": false,
            "file_count": 0,
            "owner": "lian@lian.com",
            "size_formatted": "16.5 KB",
            "id": "78c620ee-2989-4427-8eff-7748f4fbebc0",
            "size": 16883
        },
        {
            "name": "encrypted",
            "encrypted": true,
            "file_count": 0,
            "owner": "lian@lian.com",
            "size_formatted": "18.1 MB",
            "id": "47695bb8-3364-4274-939d-3c5a0df9710c",
            "size": 18997225
        },
        ...
    ],
    "name": ""
}
```

Errors

- 403 Permission error, only administrator can perform this action

Delete a Library

Available for Seafile v6.0.0+

DELETE https://cloud.seafile.com/api/v2.1/admin/libraries/{repo_id}/

Sample request

```
curl -X DELETE -H 'Authorization: Token 444d2bbf1fc78ffbeedc4704c9f41e32d926ac94' http
s://cloud.seafile.com/api/v2.1/admin/libraries/ee3b2d19-1a06-47f0-bbfa-554cab3bdedc/
```

Sample response

```
{"success":true}
```

Errors

- 403 Permission error, only administrator can perform this action

Transfer a Library

Available for Seafile v6.0.0+

PUT https://cloud.seafile.com/api/v2.1/admin/libraries/{repo_id}/

Sample request

```
curl -X PUT -d "owner=1@1.com" -H 'Authorization: Token 444d2bbf1fc78ffbeedc4704c9f41e
32d926ac94' https://cloud.seafile.com/api/v2.1/admin/libraries/ee3b2d19-1a06-47f0-bbfa
-554cab3bdedc/
```

Sample response

```
{
    "name": "test-repo",
    "encrypted":false,
    "file_count":0,
    "owner":"1@1.com",
    "size_formatted":"0 bytes",
    "id":"ee3b2d19-1a06-47f0-bbfa-554cab3bdedc",
    "size":0
}
```

Errors

- 400 owner invalid.
- 403 Permission error, only administrator can perform this action
- 404 User not found.
- 404 Library not found.
- 500 Internal Server Error

Get Library Dirents

GET https://cloud.seafile.com/api/v2.1/admin/libraries/{repo_id}/dirents/?parent_dir=
{parent_dir}

- repo-id
- parent_dir

Sample request

```
curl -H "Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd" -H 'Accept: ap
plication/json; indent=4' https://cloud.seafile.com/api/v2.1/admin/libraries/104f6537-
b3a5-4d42-b8b5-8e47e494e4cf/dirents/?parent_dir=/asd
```

Sample response

```
{
    "repo_id": "c474a093-19dc-4ddf-b0b0-72b33214ba33",
    "dirent_list": [
        {
            "file_size": "",
            "last_update": "2016-12-19T03:35:14+00:00",
            "is_file": false,
            "obj_name": "book"
        },
        {
            "file_size": "",
            "last_update": "2016-10-12T07:43:32+00:00",
            "is_file": false,
            "obj_name": "image"
        },
        {
            "file_size": "47.0 KB",
            "last_update": "2017-02-13T02:41:05+00:00",
            "is_file": true,
            "obj_name": "123.md"
        }
    ],
    "is_system_library": false,
    "repo_name": "seacloud.cc.124"
}
```

Errors

- 400 parent_dir invalid.
- 403 Feature disabled.
- 403 Permission error, only administrator can perform this action
- 404 Library not found.
- 404 Folder not found.
- 500 Internal Server Error

Shares

Get Repo User Shares

Available for Seafile v6.0.1+

GET https://cloud.seafile.com/api/v2.1/admin/shares/?repo_id={repo_id)&share_type=
{share_type}

Request parameters

- repo_id
- share_type

Sample request

```
curl -H "Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd" -H 'Accept: ap
plication/json; indent=4' 'https://cloud.seafile.com/api/v2.1/admin/shares/?repo_id=dd
d42241-e003-425d-960e-0f9f7144866f&share_type=user'
```

Sample response

```
[
    {
        "repo_id": "ddd42241-e003-425d-960e-0f9f7144866f",
        "share_type": "user",
        "permission": "r",
        "path": "/",
        "user_name": "name of user 2",
        "user_email": "2@2.com"
    }
]
```

Errors

- 400 repo_id invalid.
- 400 share_type invalid.
- 403 Permission denied.
- 404 Library not found.
- 404 Folder not found.
- 500 Internal Server Error

Get Repo Group Shares

Available for Seafile v6.0.1+

GET https://cloud.seafile.com/api/v2.1/admin/shares/?repo_id={repo_id)&share_type=
{share_type}

Request parameters

- repo_id
- share_type

Sample request

```
curl -H "Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd" -H 'Accept: ap
plication/json; indent=4' 'https://cloud.seafile.com/api/v2.1/admin/shares/?repo_id=dd
d42241-e003-425d-960e-0f9f7144866f&share_type=group'
```

Sample response

```
[
    {
        "repo_id": "ddd42241-e003-425d-960e-0f9f7144866f",
        "share_type": "group",
        "permission": "rw",
        "group_name": "group-of-lian-2",
        "path": "/",
        "group_id": 2
    }
]
```

Errors

- 400 repo_id invalid.
- 400 share_type invalid.
- 403 Permission denied.
- 404 Library not found.
- 404 Folder not found.
- 500 Internal Server Error

Share Repo to User

Available for Seafile v6.0.1+

POST https://cloud.seafile.com/api/v2.1/admin/shares/

Request parameters

- repo_id
- share_type
- share_to (user email)
- permission

Sample request

```
curl -d "repo_id=ddd42241-e003-425d-960e-0f9f7144866f&share_type=user&permission=r&sha
re_to=1@1.com&share_to=invalid@email.com" -H "Authorization: Token 9c845638b855e549c07
ff81be2a0471aa52810d7" -H 'Accept: application/json; indent=4' 'https://cloud.seafile.
com/api/v2.1/admin/shares/'
```

Sample response

```
{
    "failed": [
        {
            "error_msg": "User invalid@email.com not found.",
            "user_email": "invalid@email.com"
        }
    ],
    "success": [
        {
            "repo_id": "ddd42241-e003-425d-960e-0f9f7144866f",
            "share_type": "user",
            "permission": "r",
            "path": "/",
            "user_name": "name of user 1",
            "user_email": "1@1.com"
        }
    ]
}
```

Errors

- 400 repo_id invalid.
- 400 share_type invalid.
- 403 Permission denied.
- 404 Library not found.
- 404 Folder not found.
- 500 Internal Server Error

Share Repo to Group

Available for Seafile v6.0.1+

POST https://cloud.seafile.com/api/v2.1/admin/shares/

Request parameters

- repo_id
- share_type
- share_to (group_id)
- permission

Sample request

```
curl -d "repo_id=ddd42241-e003-425d-960e-0f9f7144866f&share_type=group&permission=r&sh
are_to=1&share_to=1232" -H "Authorization: Token 9c845638b855e549c07ff81be2a0471aa5281
0d7" -H 'Accept: application/json; indent=4' 'https://cloud.seafile.com/api/v2.1/admin
/shares/'
```

Sample response

```
{
    "failed": [
        {
            "group_id": 1232,
            "error_msg": "Group %s not found"
        }
    ],
    "success": [
        {
            "repo_id": "ddd42241-e003-425d-960e-0f9f7144866f",
            "share_type": "group",
            "permission": "r",
            "group_name": "group-of-lian",
            "path": "/",
            "group_id": 1
        }
    ]
}
```

Errors

- 400 repo_id invalid.
- 400 share_type invalid.
- 403 Permission denied.
- 404 Library not found.
- 404 Folder not found.
- 500 Internal Server Error

Modify Repo User Share Permission

Available for Seafile v6.0.1+

PUT https://cloud.seafile.com/api/v2.1/admin/shares/

Request parameters

- repo_id
- share_type
- share_to (user email)
- permission

Sample request

```
curl -X PUT -d "repo_id=ddd42241-e003-425d-960e-0f9f7144866f&share_type=user&permissio
n=rw&share_to=1@1.com" -H "Authorization: Token 9c845638b855e549c07ff81be2a0471aa52810
d7" -H 'Accept: application/json; indent=4' 'https://cloud.seafile.com/api/v2.1/admin/
shares/'
```

Sample response

```
{
    "repo_id": "ddd42241-e003-425d-960e-0f9f7144866f",
    "share_type": "user",
    "permission": "rw",
    "path": "/",
    "user_name": "name of user 1",
    "user_email": "1@1.com"
}
```

Errors

- 400 repo_id invalid.
- 400 share_type invalid.
- 403 Permission denied.
- 404 Library not found.
- 404 Folder not found.
- 500 Internal Server Error

Modify Repo Group Share Permission

Available for Seafile v6.0.1+

PUT https://cloud.seafile.com/api/v2.1/admin/shares/

Request parameters

- repo_id
- share_type
- share_to (group_id)
- permission

Sample request

```
curl -X PUT -d "repo_id=ddd42241-e003-425d-960e-0f9f7144866f&share_type=group&permissi
on=rw&share_to=1" -H "Authorization: Token 9c845638b855e549c07ff81be2a0471aa52810d7" -
H 'Accept: application/json; indent=4' 'https://cloud.seafile.com/api/v2.1/admin/share
s/'
```

Sample response

```
{
    "repo_id": "ddd42241-e003-425d-960e-0f9f7144866f",
    "share_type": "group",
    "permission": "rw",
    "group_name": "group-of-lian",
    "path": "/",
    "group_id": 1
}
```

Errors

- 400 repo_id invalid.
- 400 share_type invalid.
- 403 Permission denied.
- 404 Library not found.
- 404 Folder not found.
- 500 Internal Server Error

Delete Repo User Share

Available for Seafile v6.0.1+

DELETE https://cloud.seafile.com/api/v2.1/admin/shares/

Request parameters

- repo_id
- share_type
- share_to (user email)

Sample request

```
curl -X DELETE -d "repo_id=ddd42241-e003-425d-960e-0f9f7144866f&share_type=user&share_
to=1@1.com" -H "Authorization: Token 9c845638b855e549c07ff81be2a0471aa52810d7" -H 'Acc
ept: application/json; indent=4' 'https://cloud.seafile.com/api/v2.1/admin/shares/'
```

Sample response

```
{
    "success": true
}
```

Errors

- 400 repo_id invalid.
- 400 share_type invalid.
- 403 Permission denied.
- 404 Library not found.
- 404 Folder not found.
- 500 Internal Server Error

Delete Repo Group Share

Available for Seafile v6.0.1+

DELETE https://cloud.seafile.com/api/v2.1/admin/shares/

Request parameters

- repo_id
- share_type
- share_to (group id)

Sample request

```
curl -X DELETE -d "repo_id=ddd42241-e003-425d-960e-0f9f7144866f&share_type=group&share
_to=1" -H "Authorization: Token 9c845638b855e549c07ff81be2a0471aa52810d7" -H 'Accept:
application/json; indent=4' 'https://cloud.seafile.com/api/v2.1/admin/shares/'
```

Sample response

```
{
    "success": true
}
```

Errors

- 400 repo_id invalid.
- 400 share_type invalid.
- 403 Permission denied.
- 404 Library not found.
- 404 Folder not found.
- 500 Internal Server Error

Groups

Get all groups

Available for Seafile v6.0.0+

GET https://cloud.seafile.com/api/v2.1/admin/groups/?page=1&per_page=100

Get first page (100 records per page) of groups.

Sample request

```
curl -H "Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd" -H 'Accept: ap
plication/json; indent=4' https://cloud.seafile.com/api/v2.1/admin/groups/?page=1&per_
page=100
```

Sample response

```
{
    "page_info": {
        "current_page": 1,
        "has_next_page": true
    },
    "groups": [
        {
            "owner": "test@test.com",
            "created_at": "2016-08-01T16:58:14+08:00",
            "id": 1476,
            "name": "test_group"
        },
        {
            "owner": "1@1.com",
            "created_at": "2016-08-02T16:48:14+08:00",
            "id": 1486,
            "name": "group"
        }
        ...
    ]
}
```

Errors

- 403 Permission error, only administrator can perform this action

Delete a Group

Available for Seafile v6.0.0+

DELETE https://cloud.seafile.com/api/v2.1/admin/groups/{group_id}/

Sample request

```
curl -X DELETE -H 'Authorization: Token 444d2bbf1fc78ffbeedc4704c9f41e32d926ac94' https://cloud.seafile.com/api/v2.1/admin/groups/1486/
```

Sample response

```
{"success":true}
```

Errors

- 403 Permission error, only administrator can perform this action

Transfer a Group

Available for Seafile v6.0.0+

PUT https://cloud.seafile.com/api/v2.1/admin/groups/{group_id}/

Sample request

```
curl -X PUT -d "new_owner=1@1.com" -H 'Authorization: Token 444d2bbf1fc78ffbeedc4704c9
f41e32d926ac94' https://cloud.seafile.com/api/v2.1/admin/groups/1528/
```

Sample response

```
{
    "owner": "1@1.com",
    "created_at": "2016-08-04T17:34:05+08:00",
    "id": 1528,
    "name": "test_group"
}
```

Errors

- 403 Permission error, only administrator can perform this action
- 404 User not found.
- 500 Internal Server Error

Get Group Libraries

Available for Seafile v6.0.0+

GET https://cloud.seafile.com/api/v2.1/admin/groups/{group_id}/libraries/

Get all libraries of a group.

Sample request

```
curl -H "Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd" -H 'Accept: ap
plication/json; indent=4' https://cloud.seafile.com/api/v2.1/admin/groups/64/libraries
/
```

Sample response

```
[
    {
        "repo_id":"7460f7ac-a0ff-4585-8906-bb5a57d2e118",
        "name":"My Library",
        "permission":"rw",
        "group_id":65,
        "shared_by":"lian@lian.com",
        "size":97662
    }
]
```

Errors

- 403 Permission error, only administrator can perform this action
- 404 Group not found.

Delete Group Library

Available for Seafile v6.0.0+

DELETE https://cloud.seafile.com/api/v2.1/admin/groups/{group_id}/libraries/{repo_id}/

Sample request

```
curl -X DELETE -H 'Authorization: Token 444d2bbf1fc78ffbeedc4704c9f41e32d926ac94' http
s://cloud.seafile.com/api/v2.1/admin/groups/64/libraries/7460f7ac-a0ff-4585-8906-bb5a5
7d2e118/
```

Sample response

```
{"success":true}
```

Errors

- 403 Permission error, only administrator can perform this action
- 404 Library/Group not found.
- 500 Internal Server Error

Get Group Members

Available for Seafile v6.0.0+

GET https://cloud.seafile.com/api/v2.1/admin/groups/{group_id}/members/

Get all members of a group.

Sample request

```
curl -H "Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd" -H 'Accept: ap
plication/json; indent=4' https://cloud.seafile.com/api/v2.1/admin/groups/64/members/
```

Sample response

```
[
    {
        "login_id":"",
        "avatar_url":"https://cloud.seafile.com/media/avatars/0/1/a72299021077701e7c52
2c46fdaa87/resized/80/6ad30837f69ea7ef234dc272fb15e9e9.png",
        "contact_email":"lian@lian.com",
        "name":"name of lian",
        "is_admin":true,
        "role":"Owner",
        "group_id":65,
        "email":"lian@lian.com"
    },
    {
        "login_id":"",
        "avatar_url":"https://cloud.seafile.com/media/avatars/default.png",
        "contact_email":"1@1.com",
        "name":"123",
        "is_admin":false,
        "role":"Member",
        "group_id":65,
        "email":"1@1.com"
    }
]
```

Errors

- 403 Permission error, only administrator can perform this action
- 404 Group not found.

Delete Group Member

Available for Seafile v6.0.0+

DELETE https://cloud.seafile.com/api/v2.1/admin/groups/{group_id}/members/{email}/

Sample request

```
curl -X DELETE -H 'Authorization: Token 444d2bbf1fc78ffbeedc4704c9f41e32d926ac94' http
s://cloud.seafile.com/api/v2.1/admin/groups/64/members/foo@foo.com/
```

Sample response

```
{"success":true}
```

Errors

- 403 Permission error, only administrator can perform this action
- 403 foo@foo.com is group owner, can not be removed.
- 404 Group not found.

- 500 Internal Server Error

Add Group Member

Available for Seafile v6.0.8+

POST https://cloud.seafile.com/api/v2.1/admin/groups/{group_id}/members/

Sample request

```
curl -d "email=1@1.com&email=2@1.com" -H 'Authorization: Token 0eb24ce5db35a31f70171ec
a2f760f03f59fa09a' https://cloud.seafile.com/api/v2.1/admin/groups/65/members/
```

Sample response

```
{
    "failed":[
        {
            "email":"2@1.com","error_msg":"User 2@1.com is already a group member."
        }
    ],
    "success":[
        {
            "login_id":"",
            "avatar_url":"https://cloud.seafile.com/media/avatars/default.png",
            "contact_email":"8@1.com",
            "name":"name of 8",
            "is_admin":0,
            "role":"Member",
            "group_id":65,
            "email":"8@1.com"
        }
    ]
}
```

Errors

- 400 email invalid.
- 404 Group not found.

Update Group Member Role

Available for Seafile v6.0.8+

Set a group member as admin

PUT https://cloud.seafile.com/api/v2.1/admin/groups/{group_id}/members/{email}

Sample request

```
curl -X PUT -d "is_admin=true" -H 'Authorization: Token 0eb24ce5db35a31f70171eca2f760f
03f59fa09a' https://cloud.seafile.com/api/v2.1/admin/groups/65/members/3@1.com/
```

Sample response

```
{
    "login_id":"",
    "avatar_url":"https://cloud.seafile.com/media/avatars/default.png",
    "contact_email":"3@1.com",
    "name":"update name of 3",
    "is_admin":1,
    "role":"Admin",
    "group_id":65,
    "email":"3@1.com"
}
```

Errors

- 400 email invalid.
- 400 is_admin invalid.
- 404 Group/User not found.
- 500 Internal Server Error

Unset a group member as admin

PUT https://cloud.seafile.com/api/v2.1/admin/groups/{group_id}/members/{email}

Sample request

```
curl -X PUT -d "is_admin=false" -H 'Authorization: Token 0eb24ce5db35a31f70171eca2f760
f03f59fa09a' https://cloud.seafile.com/api/v2.1/admin/groups/65/members/3@1.com/
```

Sample response

```
{
    "login_id":"",
    "avatar_url":"https://cloud.seafile.com/media/avatars/default.png",
    "contact_email":"3@1.com",
    "name":"update name of 3",
    "is_admin":0,
    "role":"Member",
    "group_id":65,
    "email":"3@1.com"
}
```

Errors

- 400 email invalid.

- 400 is_admin invalid.
- 404 Group/User not found.
- 500 Internal Server Error

Shared Links

Download Links

Get Shared File/Dir Info

GET http://192.168.1.124:8000/api/v2.1/admin/share-links/{token}/

Request parameters

- token

Sample request

```
curl -H 'Authorization: Token cbd7705c06846425ed5c46ae0313d5b098d24154' -H 'Accept: ap
plication/json; charset=utf-8; indent=4' "http://192.168.1.124:8000/api/v2.1/admin/sha
re-links/db62f56baf1b4460996e/"
```

Sample response

```
{
    "repo_id": "0a5647c8-7708-445a-bd80-49f04b85b153",
    "ctime": "2017-06-20T08:37:13+00:00",
    "creator_name": "name of lian",
    "creator_email": "lian@lian.com",
    "obj_name": "asdf",
    "token": "db62f56baf1b4460996e",
    "view_cnt": 8,
    "link": "http://192.168.1.124:8000/d/db62f56baf1b4460996e/",
    "expire_date": "2017-06-23T08:37:13+00:00",
    "path": "/asdf/",
    "creator_contact_email": "lian@lian.com",
    "is_dir": true,
    "permissions": {
        "can_preview": true,
        "can_download": true
    },
    "is_expired": false,
    "repo_name": "sadfdaa"
}
```

Errors

- 403 Permission denied.

- 404 Share link not found.

Get Sub File/Dir List in Shared Dir

GET http://192.168.1.124:8000/api/v2.1/admin/share-links/{token}/dirents/

Request parameters

- token
- path, sub-folder of shared dir, default is `/` .

Sample request

```
curl -H 'Authorization: Token cbd7705c06846425ed5c46ae0313d5b098d24154' -H 'Accept: ap
plication/json; charset=utf-8; indent=4' "http://192.168.1.124:8000/api/v2.1/admin/sha
re-links/db62f56baf1b4460996e/dirents/?path=/sdf"
```

Sample response

```
[
    {
        "path": "/sdf/1122",
        "is_dir": true,
        "size": 0,
        "last_modified": "2017-06-21T02:18:40+00:00",
        "obj_name": "1122"
    },
    {
        "path": "/sdf/12.docx",
        "is_dir": false,
        "size": 457426,
        "last_modified": "2017-06-20T10:09:53+00:00",
        "obj_name": "12.docx"
    },
    {
        "path": "/sdf/slack-desktop-2.3.3-amd64.deb",
        "is_dir": false,
        "size": 47434600,
        "last_modified": "2017-06-20T10:27:47+00:00",
        "obj_name": "slack-desktop-2.3.3-amd64.deb"
    }
]
```

Errors

- 403 Permission denied.
- 404 Share link not found.

Download File/Dir

GET http://192.168.1.124:8000/api/v2.1/admin/share-links/{token}/download/

Request parameters

- token
- type, only used for download (sub) file/folder of shared dir, `file` or `folder` .
- path, only used for download (sub) file/folder of shared dir.

Sample request for download (sub) folder in shared dir

```
curl -H 'Authorization: Token cbd7705c06846425ed5c46ae0313d5b098d24154' -H 'Accept: ap
plication/json; charset=utf-8; indent=4' "http://192.168.1.124:8000/api/v2.1/admin/sha
re-links/db62f56baf1b4460996e/download/?path=/sdf&type=folder"
```

Sample response for download (sub) folder in shared dir

```
{
    "download_link": "http://192.168.1.124:8082/zip/395e0ea8-3936-4084-b650-64a93d8a31
3d"
}
```

After you get the download link for the (sub) folder, you should use the token in the download link (here's `395e0ea8-3936-4084-b650-64a93d8a313d`) to check if the background compression packaging has been completed by Query Task Progress, once it is finished, you can use the download link to download the (sub) folder.

Sample request for download (sub) file in shared dir

```
curl -H 'Authorization: Token cbd7705c06846425ed5c46ae0313d5b098d24154' -H 'Accept: ap
plication/json; charset=utf-8; indent=4' "http://192.168.1.124:8000/api/v2.1/admin/sha
re-links/db62f56baf1b4460996e/download/?path=/sdf/12.docx&type=file"
```

Sample response for download (sub) file in shared dir

```
{
    "download_link": "http://192.168.1.124:8082/files/2fec8ae7-ffd5-4586-b125-7234e7a6
9656/12.docx"
}
```

Sample request for download shared file

```
curl -H 'Authorization: Token cbd7705c06846425ed5c46ae0313d5b098d24154' -H 'Accept: ap
plication/json; charset=utf-8; indent=4' "http://192.168.1.124:8000/api/v2.1/admin/sha
re-links/dac219add64f4a4b9c51/download/"
```

Sample response for download shared file

```
{
    "download_link": "http://192.168.1.124:8082/files/a34af6cb-4762-4eea-b5a4-0b924e67
67d0/excel-view.xlsx"
}
```

Errors

- 403 Permission denied.
- 404 Share link not found.
- 404 File not found.
- 404 Folder not found.
- 404 Library not found.
- 500 Internal Server Error

Check Password

GET http://192.168.1.124:8000/api/v2.1/admin/share-links/{token}/check-password/

Request parameters

- token
- password

Sample request

```
curl -d 'password=11111111' -H 'Authorization: Token cbd7705c06846425ed5c46ae0313d5b09
8d24154' -H 'Accept: application/json; charset=utf-8; indent=4' "http://192.168.1.124:
8000/api/v2.1/admin/share-links/db62f56baf1b4460996e/check-password/"
```

Sample response

```
{
    "success": true
}
```

Errors

- 400 Share link is not encrypted.
- 400 password invalid.
- 403 Permission denied.
- 403 Password is not correct.
- 404 Share link not found.

Upload Links

Get Shared Dir Info

GET http://192.168.1.124:8000/api/v2.1/admin/upload-links/{token}/

Request parameters

- token

Sample request

```
curl -H 'Authorization: Token cbd7705c06846425ed5c46ae0313d5b098d24154' -H 'Accept: ap
plication/json; charset=utf-8; indent=4' "http://192.168.1.124:8000/api/v2.1/admin/upl
oad-links/360fe7d6dc684045b7f6/"
```

Sample response

```
{
    "view_cnt": 0,
    "ctime": "2017-06-20T08:37:22+00:00",
    "creator_name": "name of lian",
    "creator_email": "lian@lian.com",
    "creator_contact_email": "lian@lian.com",
    "token": "360fe7d6dc684045b7f6",
    "repo_id": "0a5647c8-7708-445a-bd80-49f04b85b153",
    "link": "http://192.168.1.124:8000/u/d/360fe7d6dc684045b7f6/",
    "obj_name": "asdf",
    "path": "/asdf/",
    "repo_name": "sadfdaa"
}
```

Errors

- 403 Permission denied.
- 404 Upload link not found.

Upload

GET http://192.168.1.124:8000/api/v2.1/admin/upload-links/{token}/upload/

Request parameters

- token

Sample request

```
curl -H 'Authorization: Token cbd7705c06846425ed5c46ae0313d5b098d24154' -H 'Accept: ap
plication/json; charset=utf-8; indent=4' "http://192.168.1.124:8000/api/v2.1/admin/upl
oad-links/360fe7d6dc684045b7f6/upload/"
```

Sample response

```
{
    "upload_link": "http://192.168.1.124:8082/upload-api/b08b20e4-beb2-4c7a-af03-fed6b
e859330"
}
```

After get upload link, you can upload file to the shared dir, for more info, please see Upload File.

Errors

- 403 Permission denied.
- 404 Upload link not found.
- 404 Folder not found.

Check Password

GET http://192.168.1.124:8000/api/v2.1/admin/upload-links/{token}/check-password/

Request parameters

- token
- password

Sample request

```
curl -d 'password=11111111' -H 'Authorization: Token cbd7705c06846425ed5c46ae0313d5b09
8d24154' -H 'Accept: application/json; charset=utf-8; indent=4' "http://192.168.1.124:
8000/api/v2.1/admin/upload-links/360fe7d6dc684045b7f6/check-password/"
```

Sample response

```
{
    "success": true
}
```

Errors

- 400 Upload link is not encrypted.
- 400 password invalid.
- 403 Permission denied.
- 403 Password is not correct.
- 404 Upload link not found.

Admin Log

Get Login Log

This api is only supported in pro edition.

GET https://cloud.seafile.com/api/v2.1/admin/logs/login/?start=2016-03-20&end=2016-03-31

Sample request

```
curl -H "Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd" -H 'Accept: ap
plication/json; indent=4' https://cloud.seafile.com/api/v2.1/admin/logs/login/?start=2
016-03-20&end=2016-03-31
```

Sample response

```
[
    {
        'email': u'lian@lian.com',
        'login_ip': u'192.168.1.124',
        'name': u'lian',
        'login_time': '2016-03-31T14:42:23+08:00'
    },
    {
        'email': u'org@org.com',
        'login_ip': u'192.168.1.124',
        'name': u'org',
        'login_time': '2016-03-31T14:39:08+08:00'
    }
]
```

Errors

- 400 start or end date invalid.
- 403 Feature disabled.

Get File Audit Log

This api is only supported in pro edition.

GET https://cloud.seafile.com/api/v2.1/admin/logs/file-audit/?start=2016-03-20&end=2016-03-31

Sample request

```
curl -H "Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd" -H 'Accept: ap
plication/json; indent=4' https://cloud.seafile.com/api/v2.1/admin/logs/file-audit/?st
art=2016-03-20&end=2016-03-31
```

Sample response

```
[
    {
        'repo_id': u'4929d0df-8c6c-43cb-8edf-40a8489689fb',
        'time': '2016-03-31T05:46:03+08:00',
        'etype': u'file-download-web',
        'ip': u'192.168.1.124',
        'user_name': u'org',
        'file_path': u'/earth.jpg',
        'user_email': u'org@org.com',
        'repo_name': ''
    },
    {
        'repo_id': u'513cd72c-c54a-463e-a18f-841efe91bd61',
        'time': '2016-03-31T06:25:22+08:00',
        'etype': u'file-download-web',
        'ip': u'192.168.1.124',
        'user_name': u'org',
        'file_path': u'/kj.md',
        'user_email': u'org@org.com',
        'repo_name': u'new-lib-of-org-1'
    }
]
```

Errors

- 400 start or end date invalid.
- 403 Feature disabled.

Get File Update Log

This api is only supported in pro edition.

GET https://cloud.seafile.com/api/v2.1/admin/logs/file-update/?start=2016-03-20&end=2016-03-31

Sample request

```
curl -H "Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd" -H 'Accept: ap
plication/json; indent=4' https://cloud.seafile.com/api/v2.1/admin/logs/file-update/?s
tart=2016-03-20&end=2016-03-31
```

Sample response

```
[
    {
        'commit_id': u'55ec5350b16d6c72a044b5a9cd9b2d62ad439364',
        'file_operation': u'Added "user.csv".',
        'repo_id': u'513cd72c-c54a-463e-a18f-841efe91bd61',
        'repo_name': u'new-lib-of-org-1',
        'time': '2016-03-31T06:25:15+08:00',
        'user_email': u'org@org.com',
        'user_name': u'org'
    },
    {
        'commit_id': u'6820d809481e3c9fb856d0650ac73a09b570a301',
        'file_operation': u'Added "kj.md"',
        'repo_id': u'513cd72c-c54a-463e-a18f-841efe91bd61',
        'repo_name': u'new-lib-of-org-1',
        'time': '2016-03-31T06:25:21+08:00',
        'user_email': u'org@org.com',
        'user_name': u'org'
    }
]
```

Errors

- 400 start or end date invalid.
- 403 Feature disabled.

Get Permission Audit Log

This api is only supported in pro edition.

GET https://cloud.seafile.com/api/v2.1/admin/logs/perm-audit/?start=2016-03-20&end=2016-03-31

Sample request

```
curl -H "Authorization: Token f2210dacd9c6ccb8133606d94ff8e61d99b477fd" -H 'Accept: ap
plication/json; indent=4' https://cloud.seafile.com/api/v2.1/admin/logs/perm-audit/?st
art=2016-03-20&end=2016-03-31
```

Sample response

```
[
    {
        'etype': u'add-repo-perm',
        'file_path': u'/folder',
        'from_email': u'org3@org3.com',
        'from_name': u'org3',
        'permission': u'rw',
        'repo_id': u'a84544e5-0b84-459d-b1e6-0399dabc76a0',
        'repo_name': '',
        'time': '2016-03-31T06:21:50+08:00',
        'to': u'org@org.com'
    },
    {
        'etype': u'add-repo-perm',
        'file_path': u'/folder',
        'from_email': u'org3@org3.com',
        'from_name': u'org3',
        'permission': u'rw',
        'repo_id': u'a84544e5-0b84-459d-b1e6-0399dabc76a0',
        'repo_name': '',
        'time': '2016-03-31T06:21:53+08:00',
        'to': u'777'
    }
]
```

Errors

- 400 start or end date invalid.
- 403 Feature disabled.

Organization

Add Organization

This api is only supported in pro edition.

POST https://cloud.seafile.com/api2/organization/

Request parameters

- username
- password
- org_name
- prefix
- quota
- member_limit

Sample request

```
curl -v -X POST -d "username=example@example.com&password=example&org_name=example&pre
fix=example&quota=100&member_limit=10" -H "Authorization: Token ccdff90e4d1efe76b2b3d9
1c06b027a5cff189d4" -H 'Accept: application/json; indent=4' https://cloud.seafile.com/
api2/organization/
```

Sample response

```
"success"
```

Add Organization User

This api is only supported in pro edition (since 6.0.9).

POST https://cloud.seafile.com/api/v2.1/admin/organizations/{org_id}/users/

Request parameters

- org_id
- email
- password

Sample request curl -d "username=1@org-3.com&password=1&org_name=org-3&prefix=org-3&quota=100&member_limit=10" -H "Authorization: Token 3f1e23157c3a1fd740e9dc1c5d748929fe319b95" -H 'Accept: application/json; indent=4' http://192.168.1.165/api2/organization/

Sample response

```
{
    "quota_usage": 0,
    "name": "6",
    "org_id": 1,
    "contact_email": "6@org.com",
    "active": true,
    "quota_total": -1,
    "email": "6@org.com"
}
```

Errors

- 400 org_id invalid.
- 400 email invalid.
- 400 password invalid.
- 400 User already exists.
- 403 The number of users exceeds the limit.
- 403 Failed. You can only invite %d members.
- 404 Organization not found.

- 500 Fail to add user.
- 500 Internal Server Error

Get Organization User Info

This api is only supported in pro edition (since 6.1.5).

GET https://cloud.seafile.com/api/v2.1/admin/organizations/{org_id}/users/{email}/

Request parameters

- org_id
- email

Sample request

```
curl -H "Authorization: Token 3f1e23157c3a1fd740e9dc1c5d748929fe319b95" -H 'Accept: ap
plication/json; indent=4' http://192.168.1.165/api/v2.1/admin/organizations/1/users/6@
org.com/
```

Sample response

```
{
    "quota_usage": 0,
    "name": "6",
    "org_id": 1,
    "contact_email": "6@org.com",
    "active": true,
    "quota_total": -1,
    "email": "6@org.com"
}
```

Errors

- 400 org_id invalid.
- 400 User is not member of organization.
- 404 Organization not found.
- 404 User not found.
- 500 Internal Server Error

Updage Organization User Info

This api is only supported in pro edition (since 6.1.5).

PUT https://cloud.seafile.com/api/v2.1/admin/organizations/{org_id}/users/{email}/

Request parameters

- org_id

- email
- active, `true` or `false`
- name
- contact_email
- quota_total, integer greater than 0, unit is MB.

Sample request

```
curl -X PUT -d "active=false&name=name-of-6&contact_email=6-contact@email.com&quota_to
tal=23" -H "Authorization: Token 3f1e23157c3a1fd740e9dc1c5d748929fe319b95" -H 'Accept:
 application/json; indent=4' http://192.168.1.165/api/v2.1/admin/organizations/1/users
/6@org.com/
```

Sample response

```
{
    "quota_usage": 0,
    "name": "name-of-6",
    "org_id": 1,
    "contact_email": "6-contact@email.com",
    "active": false,
    "quota_total": 23,
    "email": "6@org.com"
}
```

Errors

- 400 org_id invalid.
- 400 active invalid, should be 'true' or 'false'.
- 400 Failed to set quota.
- 404 Organization not found.
- 404 User not found.
- 500 Internal Server Error

Delete Organization User

This api is only supported in pro edition (since 6.0.9).

DELETE https://cloud.seafile.com/api/v2.1/admin/organizations/{org_id}/users/{email}/

Request parameters

- org_id
- email

Sample request

```
curl -X DELETE -H "Authorization: Token 0eb24ce5db35a31f70171eca2f760f03f59fa09a" -H '
Accept: application/json; indent=4' https://cloud.seafile.com/api/v2.1/admin/organizat
ions/160/users/6@org.com/
```

Sample response

```
{
    "success": true
}
```

Errors

- 400 org_id invalid.
- 403 Failed to delete: is an organization creator.
- 404 Organization not found.
- 404 User not found.
- 500 Internal Server Error

Python API

- Seafile Python API
- Install Seafile Server
- Example: Copy Library
  - Set Environment Variable
  - Copy Library
  - List Of Seafile-API

Seafile Python API

This tutorial show you how to use seafile-api, and will accomplish a "library copy" work under **Ubuntu** as example.

Install Seafile Server

First of all, make sure you have Download and Setup Seafile Server successfully. And your directory layout will be like this:

```
# tree . -L 3
.
├── ccnet
│   ├── ccnet.conf
│   ├── ......
│......
├── seafile-server-3.0.3
│   ├── seafile
│   ├── seafile.sh
│   ├── seahub
│   ├── seahub.sh
│   ├── setup-seafile.sh
│   ├── upgrade
│       ├── README
│       ├── seaf_migrate_3.py
│       ├── seaf_migrate_3.sh
│       ├── ......
│   ├── ......
│......
```

Example: Copy Library

In this example, two script files will be used: `seaf_migrate_3.sh` and `seaf_migrate_3.py` . We put them in the **upgrade** directory as you see above.

Set Environment Variable

If you want use Seafile-API, set environment variable first. That's what `seaf_migrate_3.sh` does:

1. get ccnet/seafile config file path and export them;
2. export Python path;
3. call `seaf_migrate_3.py` .

Example code

Python API

```bash
#!/bin/bash

#get path of ccnet.conf
SCRIPT=$(readlink -f "$0") # haiwen/seafile-server-3.0.3/upgrade/seaf_migrate_3.sh
UPGRADE_DIR=$(dirname "$SCRIPT") # haiwen/seafile-server-3.0.3/upgrade/
INSTALLPATH=$(dirname "$UPGRADE_DIR") # haiwen/seafile-server-3.0.3/
TOPDIR=$(dirname "${INSTALLPATH}") # haiwen/
default_ccnet_conf_dir=${TOPDIR}/ccnet

#get path of seafile.conf
function read_seafile_data_dir () {
    seafile_ini=${default_ccnet_conf_dir}/seafile.ini
    if [[ ! -f ${seafile_ini} ]]; then
        echo "${seafile_ini} not found. Now quit"
        exit 1
    fi
    seafile_data_dir=$(cat "${seafile_ini}")
    if [[ ! -d ${seafile_data_dir} ]]; then
        echo "Your seafile server data directory \"${seafile_data_dir}\" is invalid or
 doesn't exits."
        echo "Please check it first, or create this directory yourself."
        echo ""
        exit 1;
    fi

    export SEAFILE_CONF_DIR=$seafile_data_dir
}

export CCNET_CONF_DIR=${default_ccnet_conf_dir}
read_seafile_data_dir;

export PYTHONPATH=${INSTALLPATH}/seafile/lib/python2.6/site-packages:${INSTALLPATH}/se
afile/lib64/python2.6/site-packages:${INSTALLPATH}/seafile/lib/python2.7/site-packages:
${INSTALLPATH}/seahub/thirdpart:$PYTHONPATH
export PYTHONPATH=${INSTALLPATH}/seafile/lib/python2.7/site-packages:${INSTALLPATH}/se
afile/lib64/python2.7/site-packages:$PYTHONPATH

function usage () {
    echo "Usage: `basename $0` <repo-id>"
    echo "exit."
    exit 1
}
if [ $# != 1 ]; then
    usage
fi

python seaf_migrate_3.py $1
```

> **NOTE:** You can get `repo_id` at address bar of Seahub or through Seafile web API

Copy Library

Then `seaf_migrate_3.py` will call Seafile-API to copy library:

1. Get library ID from input.
2. Get origin_repo object.
3. Create a new library, set name, desc and owner.
4. Copy stuffs from old library to new library.

Example code

```python
#!/usr/bin/env python

import os
import stat
import sys
from seaserv import seafile_api

def count_files_recursive(repo_id, path='/'):
    num_files = 0
    for e in seafile_api.list_dir_by_path(repo_id, path):
        if stat.S_ISDIR(e.mode):
            num_files += count_files_recursive(repo_id,
                                               os.path.join(path, e.obj_name))
        else:
            num_files += 1
    return num_files

#Get library ID from input
origin_repo_id = sys.argv[1]

#Get origin_repo object
origin_repo = seafile_api.get_repo(origin_repo_id)
username = seafile_api.get_repo_owner(origin_repo_id)

#Create a new library, set name, desc and owner
new_repo_id = seafile_api.create_repo(name=origin_repo.name,
                                      desc=origin_repo.desc,
                                      username=username, passwd=None)

#Copy stuffs from old library to new library
dirents = seafile_api.list_dir_by_path(origin_repo_id, '/')
for e in dirents:
    print "copying: " + e.obj_name
    obj_name = e.obj_name
    seafile_api.copy_file(origin_repo_id, '/', obj_name, new_repo_id, '/',
                          obj_name, username, 0, 1)

print "*" * 60
print "OK, verifying..."
print "Origin library(%s): %d files. New Library(%s): %d files." % (
    origin_repo_id[:8], count_files_recursive(origin_repo_id),
    new_repo_id[:8], count_files_recursive(new_repo_id))
print "*" * 60
```

If you execute script file successfully, you will see these output, and of course a new library at myhome page of Seahub.

```
foo@foo:~/haiwen/seafile-server-3.0.3/upgrade$ ./seaf_migrate_test.sh c8bbb088-cbaf-41
1d-8bd8-9870763f0e5f
Loading ccnet config from /home/foo/haiwen/ccnet
Loading seafile config from /home/foo/haiwen/seafile-data
copying: test.html
copying: test-dir-2
copying: test-dir
copying: solar.html
copying: examples.desktop
************************************************************
OK, verifying...
Origin library(c8bbb088): 10 files. New Library(4d6f4837): 10 files.
************************************************************
```

List Of Seafile-API

This list is based on **seafile-server-3.0.3**, and parameter was omitted.

For more infomation about Seafile-API, please see api.py.

- seafile_api.add_inner_pub_repo()
- seafile_api.cancel_copy_task()
- seafile_api.change_repo_passwd()
- seafile_api.check_passwd()
- seafile_api.check_permission()
- seafile_api.check_quota()
- seafile_api.check_repo_access_permission()
- seafile_api.copy_file()
- seafile_api.count_inner_pub_repos()
- seafile_api.create_enc_repo()
- seafile_api.create_repo()
- seafile_api.create_virtual_repo()
- seafile_api.del_file()
- seafile_api.delete_repo_token()
- seafile_api.delete_repo_tokens_by_peer_id()
- seafile_api.diff_commits()
- seafile_api.edit_repo()
- seafile_api.generate_repo_token()
- seafile_api.get_commit_list()
- seafile_api.get_copy_task()
- seafile_api.get_decrypt_key()
- seafile_api.get_deleted()

- seafile_api.get_dir_id_by_commit_and_path()
- seafile_api.get_dir_id_by_path()
- seafile_api.get_file_id_by_commit_and_path()
- seafile_api.get_file_id_by_path()
- seafile_api.get_file_revisions()
- seafile_api.get_file_size()
- seafile_api.get_files_last_modified()
- seafile_api.get_group_repo_list()
- seafile_api.get_group_repoids()
- seafile_api.get_group_repos_by_owner()
- seafile_api.get_fileserver_access_token()
- seafile_api.get_inner_pub_repo_list()
- seafile_api.get_orphan_repo_list()
- seafile_api.get_owned_repo_list()
- seafile_api.get_repo()
- seafile_api.get_repo_list()
- seafile_api.get_repo_owner()
- seafile_api.get_repo_size()
- seafile_api.get_share_in_repo_list()
- seafile_api.get_share_out_repo_list()
- seafile_api.get_shared_groups_by_repo()
- seafile_api.get_user_quota()
- seafile_api.get_user_self_usage()
- seafile_api.get_user_share_usage()
- seafile_api.get_virtual_repo()
- seafile_api.get_virtual_repos_by_owner()
- seafile_api.group_share_repo()
- seafile_api.group_unshare_repo()
- seafile_api.is_inner_pub_repo()
- seafile_api.is_password_set()
- seafile_api.is_repo_owner()
- seafile_api.is_valid_filename()
- seafile_api.list_dir_by_commit_and_path()
- seafile_api.list_dir_by_dir_id()
- seafile_api.list_dir_by_path()
- seafile_api.list_file_by_file_id()
- seafile_api.list_repo_tokens()
- seafile_api.list_repo_tokens_by_email()
- seafile_api.move_file()
- seafile_api.post_dir()
- seafile_api.post_empty_file()
- seafile_api.post_file()

- seafile_api.put_file()
- seafile_api.query_fileserver_access_token()
- seafile_api.remove_inner_pub_repo()
- seafile_api.remove_repo()
- seafile_api.remove_share()
- seafile_api.rename_file()
- seafile_api.revert_dir()
- seafile_api.revert_file()
- seafile_api.revert_repo()
- seafile_api.set_group_repo_permission()
- seafile_api.set_passwd()
- seafile_api.set_repo_owner()
- seafile_api.set_share_permission()
- seafile_api.set_user_quota()
- seafile_api.share_repo()
- seafile_api.unset_passwd()

Data Model

Seafile internally uses a data model similar to GIT's. It consists of `Repo`, `Branch`, `Commit`, `FS`, and `Block`.

Repo

A repo is also called a library. Every repo has an unique id (UUID), and attributes like description, creator, password.

Branch

Unlike git, only two predefined branches is used, i.e., `local` and `master`.

In PC client, modifications will first be committed to the `local` branch. Then the `master` branch is downloaded from server, and merged into `local` branch. After that the `local` branch will be uploaded to server. Then the server will fast-forward its `master` branch to the head commit of the just uploaded branch.

When users update a repo on the web, modifications will first be committed to temporary branch on the server, then merged into the `master` branch.

Commit

Like in GIT.

FS

There are two types of FS objects, `SeafDir Object` and `Seafile Object`. `SeafDir Object` represents a directory, and `Seafile Object` represents a file.

Block

A file is further divided into blocks with variable lengths. We use Content Defined Chunking algorithm to divide file into blocks. A clear overview of this algorithm can be found at http://pdos.csail.mit.edu/papers/lbfs:sosp01/lbfs.pdf. On average, a block's size is around 1MB.

This mechanism makes it possible to deduplicate data between different versions of frequently updated files, improving storage efficiency. It also enables transferring data to/from multiple servers in parallel.

Components of Seafile Server

Seafile server comprises of the following services.

- **Ccnet daemon** (ccnet for client side or ccnet-server for server side)：networking service daemon. In our initial design, Ccnet worked like a traffic bus. All the network traffic between client, server and internal traffic between different components would go through Ccnet. After further development we found that file transfer is improved by utilizing the Seafile daemon component directly.
- **Seafile daemon**：data service daemon
- **Seahub**：the website. Seafile server package contains a light-weight Python HTTP server `gunicorn` that serves the website. Seahub runs as an application within gunicorn.
- **FileServer**: handles raw file upload/download functions for Seahub. Due to Gunicorn being poor at handling large files, so we wrote this "FileServer" in the C programming language to serve raw file upload/download.
- **Controller**: monitors ccnet and Seafile daemons, restarts them if necessary.

The picture below shows how Seafile desktop client syncs files with Seafile server:
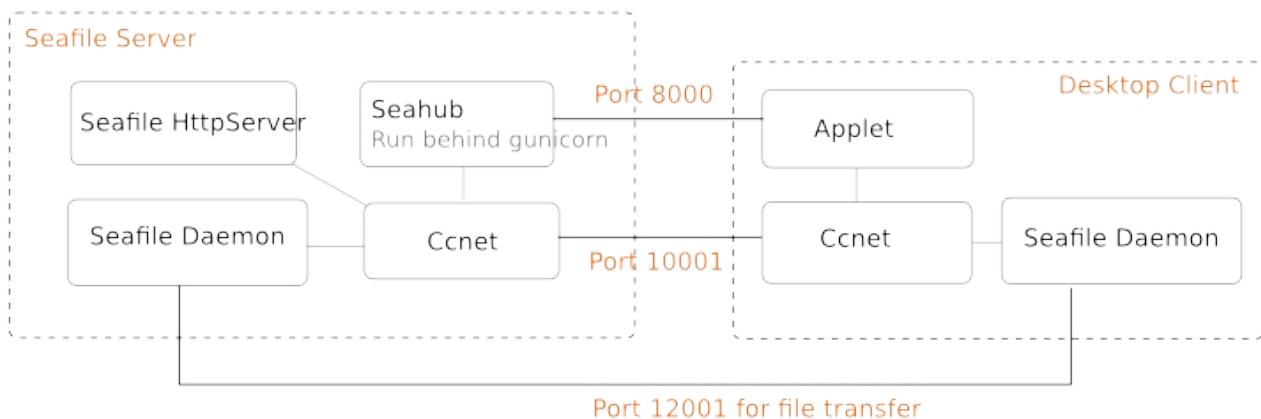
The picture below shows how Seafile mobile client interacts with Seafile server:
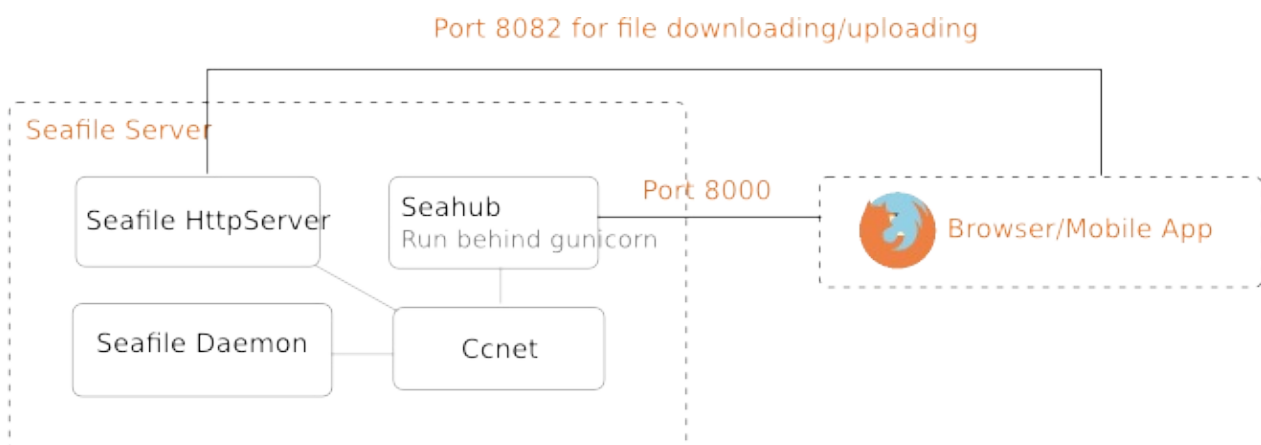
The picture below shows how Seafile mobile client interacts with Seafile server if the server is configured behind Nginx/Apache:
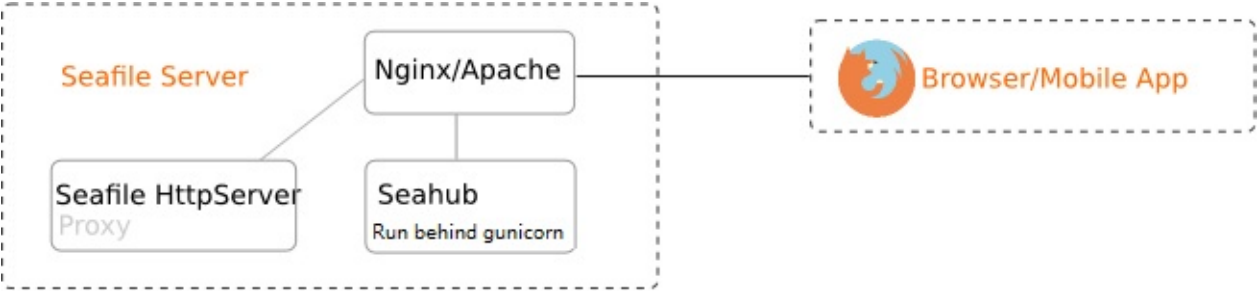
Synchronization algorithm

This article tries to give an overview on Seafile's file synchronization algorithm. For clarity, some details are deliberately omitted, but it should help you get the big picture.

To better understand this article, you should first read Seafile data model.

The Basic Work Flow

Each downloaded repo is bound to an ordinary local folder. Using Git's terminology, we call this local folder the "worktree".

A typical synchronization work flow consists of the following steps:

1. Seafile client daemon detects changes in the worktree (via inotify etc).
2. The daemon commits the changes to the `local` branch.
3. Download new changes from the `master` branch on the server (if any).
4. Merge the downloaded branch into `local` branch (also checkout changes to worktree).
5. Fast-forward upload `local` branch to server's `master` branch.

Since the above work flow may be interrupted at any point by shutting down the program or computer, after reboot we lose all notifications from the OS. We need a reliable and efficient way to determine which files in the worktree have been changed (even after reboots).

We use Git's index file to do this. It caches the timestamps of every file in the worktree when the last commit is generated. So we can easily and reliably detect changed files in the worktree since the latest commit by comparing timestamps.

Another notable case is what happens if two clients try to upload to the server simultaneously. The commit procedure on the server ensures atomicity. So only one client will update the `master` branch successfully, while the other will fail.

The failing client will restart the sync work flow later. It will first merge the changes from the succeeded client then upload again.

Merge

The most tricky part of the syncing algorithm is merging.

Git's merge algorithm doesn't work well enough for auto synchronization.

Firstly, if a merge is interrupted, git requires you to reset to the latest commit and merge again. It's not a problem for Git since it's a single command. But seafile runs as a daemon and may be kill at any time. The user may have changed some files in the worktree between the interruption and restart. Resetting the worktree will LOSE user's uncommitted data.

Secondly, Git's merge command will fail if it fails to update a file in the worktree. But on Windows, an opened Office document will be write-protected by the Office process. So the merge may fail in this case.

That's why programs use Git directly for auto-sync is not reliable.

Seafile implement its own merge algorithm based on the ideas from Git's merge algorithm.

It handles the first problem by "redoing" the merge carefully after restart. It handles the second problem by not starting merge until no file is write-protected in the worktree.

Seafile's merge algorithm also handles all the conflict cases handled by Git.

Seafile Server Changelog

6.2

From 6.2, It is recommended to use WSGI mode for communication between Seahub and Nginx/Apache. Two steps are needed if you'd like to switch to WSGI mode:

1. Change the config file of Nginx/Apache.
2. Restart Seahub with `./seahub.sh start` instead of `./seahub.sh start-fastcgi`

The configuration of Nginx is as following:

```
location / {
        proxy_pass         http://127.0.0.1:8000;
        proxy_set_header   Host $host;
        proxy_set_header   X-Real-IP $remote_addr;
        proxy_set_header   X-Forwarded-For $proxy_add_x_forwarded_for;
        proxy_set_header   X-Forwarded-Host $server_name;
        proxy_read_timeout  1200s;

        # used for view/edit office file via Office Online Server
        client_max_body_size 0;

        access_log      /var/log/nginx/seahub.access.log;
        error_log       /var/log/nginx/seahub.error.log;
    }
```

The configuration of Apache is as following:

```
    # seahub
    SetEnvIf Authorization "(.*)" HTTP_AUTHORIZATION=$1
    ProxyPass / http://127.0.0.1:8000/
    ProxyPassReverse / http://127.0.0.1:8000/
```

6.2.2 (2017/09/25)

- [fix] Fix register button can't be clicked in login page
- [fix] Fix login_success field not exist in sysadmin_extra_userloginlog

6.2.1 (2017/09/22)

- [fix] Fix upgrade script for SQLite database
- Add Czech language
- [UI] Move password setting to a separate section

- [UI] Add divider to file operation menu
- [UI] Use high DPI icon in favorites page
- [UI] Focus on password fields by default
- [UI] Show feedback message when restore a library to a snapshot
- [fix] Don't import settings in seafile.conf to database

6.2.0 beta (2017/09/14)

- Redesign login page, adding a background image.
- Add two factor authentication
- Clean the list of languages
- Add the ability of tagging a snapshot of a library (Use `ENABLE_REPO_SNAPSHOT_LABEL = True` to turn the feature on)
- [Admin] Add an option to enable users to share a library to any groups in the system.
- Use WSGI as the default mode for deploying Seahub.
- Add a field Reference ID to support changing users primary ID in Shibboleth or LDAP
- Improved performance of loading library list
- Support adding a custom user search function (https://github.com/haiwen/seafile-docs/commit/115f5d85cdab7dc272da81bcc8e8c9b91d85506e)
- Other small UI improvements

6.1

If you upgrade from 6.0 and you'd like to use the feature video thumbnail, you need to install ffmpeg package:

```
# for ubuntu 16.04
apt-get install ffmpeg
pip install pillow moviepy

# for Centos 7
yum -y install epel-release
rpm --import http://li.nux.ro/download/nux/RPM-GPG-KEY-nux.ro
yum -y install ffmpeg ffmpeg-devel
pip install pillow moviepy
```

6.1.2 (2017.08.15)

- Use user's language as lang setting for OnlyOffice
- Improve performance for getting user's unread messages
- Fix error when uploading files to system default library template
- Users can restore their own deleted libraries
- Improve performance when move or copy multiple files/folders

- Add "details" for libraries, folders and files to show information like how many files in a library/folder
- [fix] Fix a bug in seaf-gc
- [fix, API] Fix a bug in creating folder API
- [admin] Improve performance in getting total file number, used space and total number of devices
- [fix] Fix MySQL connection pool in Ccnet

6.1.1 (2017.06.15)

- Disable thumbnail for video files in default
- Enable fixing the email for share link to be fixed in certain language (option SHARE_LINK_EMAIL_LANGUAGE in seahub_setting.py). So admin can force the language for a email of a share link to be always in English, regardless of what language the sender is using.
- The language of the interface of CollaboraOffice/OnlyOffice will be determined by the language of the current user.
- Display the correct image thumbnails in favorites instead of the generic one
- Enable set favicon and logo via admin panel
- Admin can add libraries in admin panel

6.1.0 beta (2017.05.11)

Web UI Improvement:

1. Add thumbnail for video files
2. Improved image file view, using thumbnail to view pictures
3. Improve pdf preview in community edition
4. Move items by drap & drop
5. Add create docx/xlsx/pptx in web interface
6. Add OnlyOffice integration
7. Add Collabora integration
8. Support folder upload in community edition
9. Show which client modify a file in history, this will help to find which client accidentally modified a file or deleted a file.

Improvement for admins:

1. Admin can set user's quote, delete users in bulk
2. Support using admin panel in mobile platform
3. Add translation for settings page

System changes:

1. Remove wiki by default

2. Upgrade Django to 1.8.18
3. Clean Ajax API
4. Increase share link token length to 20 characters
5. Upgrade jstree to latest version

6.0

Note: If you ever used 6.0.0 or 6.0.1 or 6.0.2 with SQLite as database and encoutered a problem with desktop/mobile client login, follow https://github.com/haiwen/seafile/pull/1738 to fix the problem.

6.0.9 (2017.03.30)

- Show user' name instead of user's email in notifications sent out by email
- Add config items for setting favicon, disable wiki feature
- Add css id to easily hide user password reset and delete account button
- [fix] Fix UI bug in restoring a file from snapshot
- [fix] Fix after renaming a file, the old versions before file rename can't be downloaded
- [security] Fix XSS problem of the "go back" button in history page and snapshot view page

6.0.8 (2017.02.16)

Improvement for admin

- Admin can add/delete group members
- Admin can create group in admin panel
- Show total storage, total number of files, total number of connected devices in the info page of admin panel
- Force users to change password if imported via csv
- Support set user's quota, name when import user via csv
- Set user's quota in user list page
- Add search group by group name
- Use ajax when deleting a user's library in admin panel
- Support logrotate for controller.log
- Add `# -*- coding: utf-8 -*-` to seahub_settings.py, so that admin can use non-ascii characters in the file.
- Ingore white space character in the end of lines in ccnet.conf
- Add a log when a user can't be find in LDAP during login, so that the system admin can know whether it is caused by password error or the user can't be find
- Delete shared libraries information when deleting a user

Other

- [fix] Uploading files with special names lets seaf-server crash
- [fix] Fix user search when global address book is disabled in CLOUD_MODE
- [fix] Avoid timeout in some cases when showing a library trash
- Show "the account is inactive" when an inactive account try to login
- [security] Remove viewer.js to show open document files (ods, odt) because viewer.js is not actively maintained and may have potential security bugs (Thanks to Lukas Reschke from Nextcloud GmbH to report the issue)
- [fix] Fix PostgreSQL support
- Update Django to 1.8.17
- Change time_zone to UTC as default
- [fix] Fix quota check: users can't upload a file if the quota will be exceeded after uploading the file
- [fix] Fix quota check when copy file from one library to another
- [fix] Prevent admin from access group's wiki
- [fix] Fix a bug when download folder in grid view

6.0.7 (2016.12.16)

- [fix] Fix generating of password protected link in file view page
- [fix] Fix .jpg/.JPG image display in IE10
- Export quota usage in export Excel in user list admin page
- [fix] Fix admin can't delete broken libraries
- Add "back to previous page" link in trash page, history page
- [fix] Improve logo show in About page
- [fix] Fix file encoding for text file editing online
- [fix] Don't show operation buttons for broken libraries in normal users page

6.0.6 (2016.11.16)

- [fix] Fix the shared folder link in the notification message when a user share a folder to another user
- [fix] Update Django version from 1.8.10 to 1.8.16
- [fix] Fix support for PostgreSQL
- [fix] Fix SQLite database locking problem
- [fix] Fix the shared folder name is not changed after removing the old share, renaming the folder and re-sharing the folder
- [fix] Fix sub-folder accidentially show the files in parent folder when the parent folder contains more than 100 files
- [fix] Fix image preview navigation when there are more than 100 entries in a folder
- [fix] Fix bug when admin searching unexisting user
- [fix] Fix jpeg image display in IE10
- Add support for online view of mov video files
- Make web access token expiring time configurable

- Add an option on server to control block size for web upload files

6.0.5 (2016.10.17)

- [fix] Fix API for uploading file by blocks (Used by iOS client when uploading a large file)
- [fix] Fix a database connection problem in ccnet-server
- [fix] Fix moved files are still present in local folder until refresh
- [fix] Fix admin panel can't show deleted libraries

6.0.4 (2016.09.22)

- [fix] Fix not able to move files via WebDAV interface
- Check whether the quota will exceed before saving the uploaded file to Seafile via Web UI or API
- [fix] Fix owner can't restore a deleted file or folder in snapshot
- [fix] Fix UI of personal profile page
- [fix] Fix in some cases mobile devices can't be unlinked
- [fix] Fix connection problem for the latest MariaDB in initialisation script
- [fix] PNG Thumbnail creation broken in 6.0.3 (getexif failes)
- Make maxNumberOfFiles configurable
- [fix] Remember the sorting of libraries
- Add Finnish translation
- Video + audio no longer be limited by max preview size

6.0.3 (2016.09.03)

- [fix] Fix a bug in sqlite database upgrade script
- [fix] Fix a bug in database connection pool
- [fix] Fix a bug in file comment

6.0.2 (2016.09.02)

- [fix] Fix a bug in sqlite database table locking
- Update translations
- Support create libraries for Seafile Drive client

6.0.1 beta (2016.08.22)

- [fix] Fix default value of created_at in table api2_tokenv2. This bug leads to login problems for desktop and mobile clients.
- [fix] Fix a bug in generating a password protected share link
- Improve checking the user running Seafile must be the owner of seafile-data. If seafile-data is symbolic link, check the destination folder instead of the symbolic link.

- [UI] Improve rename operation
- Admin can set library permissions in admin panel
- Show name/contact email in admin panel and enable search user by name/contact email
- Add printing style for markdown
- The "Seafile" in "Welcome to Seafile" message can be customised by SITE_NAME
- Improve sorting of files with numbers
- [fix] Fix can't view more than 100 files
- [API] Add admin API to only return LDAP imported user list

6.0.0 beta (2016.08.02)

- Add full screen Web UI
- Code clean and update Web APIs
- Add file comment
- Improve zip downloading by adding zip progress
- Change of navigation labels
- [admin] Add group transfer function in admin panel
- Remove number of synced libraries in devices page for simplify the interface and concept
- Update help pages

5.1

Warning:

- The concept of sub-library is removed in version 5.1. You can do selective sync with the latest desktop client
- The group message **reply** function is removed, and the old reply messages will not be shown with the new UI

Note: when upgrade from 5.1.3 or lower version to 5.1.4+, you need to install python-urllib3 (or python2-urllib3 for Arch Linux) manually:

```
# for Ubuntu
sudo apt-get install  python-urllib3
# for CentOS
sudo yum install python-urllib3
```

5.1.4 (2016.07.23)

- [fix] Fix seaf-fsck.sh --export fails without database
- [fix] Fix users with Umlauts in their display name breaks group management and

api2/account/info on some special Linux distribution

- Remove user from groups when a user is deleted.
- [fix] Fix can't generate shared link for read-only shared library
- [fix] Fix can still view file history after library history is set to "no history".
- [fix] Fix after moving or deleting multiple selected items in the webinterface, the buttons are lost until reloading
- Check user before start seafile. The user must be the owner of seafile-data directory
- Don't allow emails with very special characters that may containing XSS string to register
- [fix] During downloading multiple files/folders, show "Total size exceeds limits" instead of "internal server error" when selected items exceeds limits.
- [fix] When delete a share, only check whether the be-shared user exist or not. This is to avoid the situation that share to a user can't be deleted after the user be deleted.
- Add a notificition to a user if he/she is added to a group
- Improve UI for password change page when forcing password change after admin reset a user's password
- [fix] Fix duplicated files show in Firefox if the folder name contains single quote '

5.1.3 (2016.05.30)

- [security] Fix permission checking for generating share links
- Add an option (ENABLE_SETTINGS_VIA_WEB) to ignore settings via Web UI (system admin->settings)
- [fix] Making user search (used in auto-completion) case insensitive

5.1.2 (2016.05.13)

- [fix] Fix group rename
- [fix] Fix group transfer
- Send notifications to members when a new library is shared to a group
- Download multiple selected files from Seahub as a ZIP-file
- Use seafile-data/http-temp to store zip file when downloading a dir
- [UI] Remember the expanded status of groups in the left hand nav bar
- [accessibility] Improve accessiblity of library trash/history page by making links for operations selectable by tab.
- [accessibility] Improve accessiblity of dialogs, add missing labelledby properties for the whole dialog.
- [accessibility] Improve file/folder upload menu
- list all devices in admin panel
- Add syslog support for seafile.log

5.1.1 (2016.04.08)

Note: downloading multiple files at once will be added in the next release.

- A few UI Improvement and fixes
- Add group-discussion (warning: the group message reply function is removed, and the old reply messages will not be shown with the new UI)
- Add an option for disable forcing users to change password (FORCE_PASSWORD_CHANGE, default is True)
- Support new Shibboleth users be created as inactive and activated via Admin later (SHIB_ACTIVATE_AFTER_CREATION , default is True)
- Update jquery to v1.11

5.1.0 beta (2016.03.22)

Note: in this version, the group discussion is not re-implement yet. It will be available when the stable verison is released.

- Redesign navigation
- Rewrite group management
- Improve sorting for large folder
- Remember the sorting option for folder
- Improve devices page
- Update icons for libraries and files
- Remove library settings page, re-implement them with dialogs
- Remove group avatar
- Don't show share menu in top bar when multiple item selected
- Auto-focus on username field when loading the login page
- Remove self-introduction in user profile
- Upgrade to django 1.8
- Force the user to change password if adding by admin or password reset by admin
- disable add non-existing user to a group

5.0

Note when upgrade to 5.0 from 4.4

You can follow the document on major upgrade (http://manual.seafile.com/deploy/upgrade.html)

In Seafile 5.0, we have moved all config files to folder `conf` , including:

- seahub_settings.py -> conf/seahub_settings.py
- ccnet/ccnet.conf -> conf/ccnet.conf
- seafile-data/seafile.conf -> conf/seafile.conf
- [pro only] pro-data/seafevents.conf -> conf/seafevents.conf

If you want to downgrade from v5.0 to v4.4, you should manually copy these files back to the original place, then run minor_upgrade.sh to upgrade symbolic links back to version 4.4.

The 5.0 server is compatible with v4.4 and v4.3 desktop clients.

Common issues (solved) when upgrading to v5.0:

- DatabaseError after Upgrade to 5.0
  https://github.com/haiwen/seafile/issues/1429#issuecomment-153695240

5.0.5 (2016.03.02)

- Get name, institution, contact_email field from Shibboleth
- [WebDAV] Don't show sub-libraries
- Enable LOGIN_URL to be configured, user need to add LOGIN_URL to seahub_settings.py explicitly if deploy at non-root domain, e.g. LOGIN_URL = '//accounts/login/'.
- Add ENABLE_USER_CREATE_ORG_REPO to enable/disable organization repo creation.
- Change the Chinese translation of "organization"
- Use GB/MB/KB instead of GiB/MiB/KiB in quota calculation and quota setting (1GB = 1000MB = 1,000,000KB)
- Show detailed message if sharing a library failed.
- [fix] Fix JPG Preview in IE11
- [fix] Show "out of quota" instead of "DERP" in the case of out of quota when uploading files via web interface
- [fix] Fix empty nickname during shibboleth login.
- [fix] Fix default repo re-creation bug when web login after desktop.
- [fix] Don't show sub-libraries at choose default library page, seafadmin page and save shared file to library page
- [fix] Seafile server daemon: write PID file before connecting to database to avoid a problem when the database connection is slow
- [fix] Don't redirect to old library page when restoring a folder in snapshot page

5.0.4 (2016.01.13)

- [fix] Fix unable to set a library to keep full history when the globally default keep_days is set.
- [fix] Improve the performance of showing library trash
- [fix] Improve share icon
- Search user by name in case insensitive way
- Show broken libraries in user's library page (so they can contact admin for help)
- [fix] Fix cache for thumbnail in sharing link
- [fix] Enable copy files from read-only shared libraries to other libraries

- [fix] Open image gallery popup in grid view when clicking the thumbnail image

5.0.3 (2015.12.17)

- [UI] Improve UI of all groups page
- Don't allow sharing library to a non-existing user
- [fix, admin] Fix deleting a library when the owner does not exist anymore
- [fix] Keep file last modified time when copy files between libraries
- Enable login via username in API
- [UI] Improve markdown editor

Improve seaf-fsck

- Do not set "repaired" mark
- Clean syncing tokens for repaired libraries so the user are forced to resync the library
- Record broken file paths in the modification message

Sharing link

- Remember the "password has been checked" information in session instead of memcached
- [security] Fix password check for visiting a file in password protected sharing link.
- Show file last modified time
- [fix] Fix image thumbnail in grid view
- [UI] Improve UI of grid view mode

5.0.2 (2015.12.04)

- [admin] Show the list of groups an user joined in user detail page
- [admin] Add exporting user/group statistics into Excel file
- Showing libraries list in "All Groups" page
- Add importing group members from CSV file
- [fix] Fix the performance problem in showing thumbnails in folder sharing link page
- [fix] Clear cache when set user name via API
- [fix, admin] Fix searching libraries by name when some libraries are broken

5.0.1 beta (2015.11.12)

- [fix] Fix start up parameters for seaf-fuse, seaf-server, seaf-fsck
- Update Markdown editor and viewer. The update of the markdown editor and parser removed support for the Seafile-specific wiki syntax: Linking to other wikipages isn't possible anymore using `[[ Pagename]]` .
- Add tooltip in admin panel->library->Trash: "libraries deleted 30 days before will be cleaned automatically"
- Include fixes in v4.4.6

5.0.0 beta (2015.11.03)

UI changes:

- change most png icons to icon font
- UI change of file history page
- UI change of library history page
- UI change of trash page
- UI change of sharing link page
- UI change of rename operation
- Add grid view for folder sharing link
- Don't open a new page when click the settings, trash and history icons in the library page
- other small UI improvements

Config changes:

- Move all config files to folder `conf`
- Add web UI to config the server. The config items are saved in database table (seahub-dab/constance_config). They have a higher priority over the items in config files.

Trash:

- A trash for every folder, showing deleted items in the folder and sub-folders. Others changes

Admin:

- Admin can see the file numbers of a library
- Admin can disable the creation of encrypted library

Security:

- Change most GET requests to POST to increase security

4.4

4.4.6 (2015.11.09)

- [security] Fix a XSS problem in raw sharing link
- [fix] Delete sharing links when deleting a library
- [fix] Clean Seafile tables when deleting a library
- [fix] Add tag to the link in upload folder email notification
- [fix] Fix a bug in creating a library (after submit a wrong password, the submit button is no longer clickable)

4.4.5 (2015.10.31)

- [fix] Fix a bug in deleting sharing link in sharing dialog.

4.4.4 (2015.10.27)

- [fix] Fix support for syncing old formatted libraries
- Only import LDAP users to Seafile internal database upon login
- Only list imported LDAP users in "organization->members"
- Remove commit and fs objects in GC for deleted libraries
- Improve error log for LDAP
- Add "transfer" operation to library list in "admin panel->a single user"
- [fix] Fix the showing of the folder name for upload link generated from the root of a library

4.4.3 (2015.10.15)

- [security] Check validity of file object id to avoid a potential attack
- [fix] Check the validity of system default library template, if it is broken, recreate a new one.
- [fix] After transfer a library, remove original sharing information
- [security] Fix possibility to bypass Captcha check
- [security] More security fixes.

4.4.2 (2015.10.12)

- [fix] Fix sometimes a revision is missing from a file's version history
- [security] Use HTTP POST instead of GET to remove libraries
- [fix] Fix a problem that sharing dialog not popup in IE10
- A few other small UI improvements

4.4.1 (2015.09.24)

- [fix] Fix a bug in setting an user's language
- [fix] Show detailed failed information when sharing libraries failed
- Update translations
- [API] Add API to list folders in a folder recursively
- [API] Add API to list only folders in a folder

4.4.0 (2015.09.16)

New features:

- Allow group names with spaces

- Enable generating random password when adding an user
- Add option SHARE_LINK_PASSWORD_MIN_LENGTH
- Add sorting in share link management page
- Show total/active number of users in admin panel
- Other UI improvements

Fixes:

- [fix] Fix a bug that causing duplications in table LDAPImport
- [security] Use POST request to handle password reset request to avoid CSRF attack
- Don't show password reset link for LDAP users
- set locale when Seahub start to avoid can't start Seahub problem in a few environments.

4.3

4.3.2 (2015.08.20)

- [fix, important] Bug-fix and improvements for seaf-fsck
- [fix, important] Improve I/O error handling for file operations on web interface
- Update shared information when a sub-folder is renamed
- [fix] Fix bug of list file revisions
- Update translations
- [UI] Small improvements
- [fix] Fix api error in opCopy/opMove
- Old library page (used by admin in admin panel): removed 'thumbnail' & 'preview' for image files
- [fix] Fix modification operations for system default library by admin

4.3.1 (2015.07.29)

- [fix] Fix generating image thumbnail
- [UI] Improve UI for sharing link page, login page, file upload link page
- [security] Clean web sessions when reset an user's password
- Delete the user's libraries when deleting an user
- Show link expiring date in sharing link management page
- [admin] In a user's admin page, showing libraries' size and last modify time

4.3.0 (2015.07.21)

Usability Improvement

- [UI] Improve ui for file view page

- [UI] Improve ui for sorting files and libraries
- Redesign sharing dialog
- Enable generating random password for sharing link
- Remove private message module
- Remove direct *single* file sharing between users (You can still sharing folders)
- Change "Quit" to "Leave group" in group members page

Others

- Improve user management for LDAP
- [fix] Fix a bug that client can't detect a library has been deleted in the server
- [security] Improve permission check in image thumbnail
- [security] Regenerate Seahub secret key, the old secret key lack enough randomness
- Remove the support of ".seaf" format
- [API] Add API for generating sharing link with password and expiration
- [API] Add API for generating uploading link
- [API] Add API for link files in sharing link
- Don't listen in 10001 and 12001 by default.
- Add an option to disable sync with any folder feature in clients
- Change the setting of THUMBNAIL_DEFAULT_SIZE from string to number, i.e., use `THUMBNAIL_DEFAULT_SIZE = 24` , instead of `THUMBNAIL_DEFAULT_SIZE = '24'`

4.2

Note when upgrade to 4.2 from 4.1:

If you deploy Seafile in a non-root domain, you need to add the following extra settings in seahub_settings.py:

```
COMPRESS_URL = MEDIA_URL
STATIC_URL = MEDIA_URL + '/assets/'
```

4.2.3 (2015.06.18)

- Add global address book and remove the contacts module (You can disable it if you use CLOUD_MODE by adding ENABLE_GLOBAL_ADDRESSBOOK = False in seahub_settings.py)
- Use image gallery module in sharing link for folders containing images
- [fix] Fix missing library names (show as none) in 32bit version
- [fix] Fix viewing sub-folders for password protected sharing
- [fix] Fix viewing starred files
- [fix] Fix supporting of uploading multi-files in clients' cloud file browser
- Improve security of password resetting link

4.2.2 (2015.05.29)

- [fix] Fix picture preview in sharing link of folders
- Improve add library button in organization tab

4.2.1 (2015.05.27)

- Add direct file download link
- [fix] Fix group library creation bug
- [fix] Fix library transfer bug
- [fix] Fix markdown file/wiki bug
- Don't show generating sharing link for encrypted libraries
- Don't show the list of sub-libraries if user do not enable sub-library
- Enable adding existing libraries to organization
- Add loading tip in picture preview page

4.2.0 beta (2015.05.13)

Usability

- Remove showing of library description
- Don't require library description
- Keep left navigation bar when navigate into a library
- Generate share link for the root of a library

Security Improvement

- Remove access tokens (all clients will log out) when a users password changed
- Temporary file access tokens can only be used once
- sudo mode: confirm password before doing sysadmin work

Platform

- Use HTTP/HTTPS sync only, no longer use TCP sync protocol
- read/write permission on sub-folders (Pro)
- Support byte-range requests
- Automatically clean of trashed libraries
- [LDAP] Save user information into local DB after login via LDAP

4.1

4.1.2 (2015.03.31)

- [fix] Fix several packaging related bugs (missing some python libraries)
- [fix] Fix webdav issue

- [fix] Fix image thumbnail in sharing link
- [fix] Fix permission mode of seaf-gc.sh
- Show detailed time when mouse over a relative time

4.1.1 (2015.03.25)

- Add trashed libraries (deleted libraries will first be put into trashed libraries where system admin can restore)
- [fix] Fix upgrade script for SQLite
- Improve seaf-gc.sh
- Do not support running on CentOS 5.

4.1.0 beta (2015.03.18)

- Shibboleth authentication support.
- Redesign fsck.
- Add image thumbnail in folder sharing link
- Add API to support logout/login an account in the desktop client
- Add API to generate thumbnails for images files
- Clean syncing tokens after deleting an account
- Change permission of seahub_settings.py, ccnet.conf, seafile.conf to 0600
- Update Django to v1.5.12

4.0

4.0.6 (2015.02.04)

Important

- [fix] Fix transfer library error in sysadmin page
- [fix] Fix showing of space used in sysadmin page for LDAP users
- Improved trash listing performance

Small

- [webdav] list organisation public libraries
- Disable non-shibboleth login for shibboleth users
- [fix] Fix wrong timestamp in file view page for files in sub-library
- Add Web API for thumbnail
- Add languages for Thai and Turkish, update a few translations

4.0.5 (2015.01.14)

Important

- [fix] Fix memory leak in HTTP syncing
- Repo owner can restore folders/files from library snapshot
- Update translations
- Only repo owner can restore a library to a snapshot

Small improvements

- [fix] Remote redundant logs in seaf-server
- [fix] Raise 404 when visiting an non-existing folder
- [fix] Enable add admin when LDAP is enabled
- Add API to get server features information (what features are supported by this server)
- [fix] Fix throttle for /api2/ping

4.0.4 (2015.01.06)

- [fix] Fix syncing sub-library with HTTP protocol
- [fix] Fix a bug in setup-seafile-mysql.sh

4.0.3 (2014.12.30)

- [fix] Fix unable to share library to another user

4.0.2 (2014.12.26)

- Add image thumbnail
- Add Shibboleth support (beta)
- [fix] Fix performance problem in listing files API
- [fix] Fix listing files of a large folder
- [fix] Fix folder sharing link with password protection
- [fix] Fix deleting broken libraries in the system admin panel

4.0.1 (2014.11.29)

- [fix] Fix bugs in syncing with HTTP protocol
- Add upgrading script (from v3.1 to v4.0)

4.0.0 (2014.11.10)

- Add HTTP syncing support
- Merge FileServer into seaf-server

3.1

3.1.7 (2014.10.20)

- [fix] Fixed performance problem in WebDAV extension
- [fix] Fixed quota check in WebDAV extension
- [fix] Fixed showing libraries with same name in WebDAV extension
- Add "clear" button in a library's trash
- Support upload a folder in web interface when using Chrome
- [fix] Improve small errors when upload files via Web interface
- [fix] Fix moving/coping files when the select all file checkbox is checked

3.1.6 (2014.09.11)

- [Fix] Fix bug in uploading >1GB files via Web
- [Fix] Remove assert in Ccnet to avoid denial-of-service attack
- Revert the work "access token generated by FileServer can only be used once" because this leads to several problems

3.1.5 (2014.08.29)

- [Fix] Fix multi-file upload in upload link and library page
- [Fix] Fix libreoffice file online view
- Add 'back to top' for pdf file view.
- [Fix] Fix "create sub-library" button under some language
- [Fix popup] Fix bug in set single notice as read.

3.1.4 (2014.08.26)

- [Fix, security] Fix permission check for PDF full screen view
- [Fix] Fix copy/move multiple files in web
- Improve UI for group reply notification
- Improve seaf-fsck, seaf-fsck now can fix commit missing problem
- [Security improve] Access token generated by FileServer can only be used once.

3.1.3 (2014.08.18)

- [Fix] fix memory leak
- [Fix] fix a memory not initialized problem which may cause sync problem under heavy load.
- [Fix] fix creating personal wiki

3.1.2 (2014.08.07)

- Use unix domain socket in ccnet to listen for local connections. This isolates the access

to ccnet daemon for different users. Thanks to Kimmo Huoman and Henri Salo for reporting this issue.

3.1.1 (2014.08.01)

- Add a bash wrapper for seafile-gc
- [Fix] fix listing libraries when some libraries are broken
- Remove simplejson dependency
- Update translations
- Add "Back to Top" button in file view page
- Improve page refreshing after uploading files

3.1.0 (2014.07.24)

Syncing

- Improve performance: easily syncing 10k+ files in a library.
- Don't need to download files if they are moved to another directory.

Platform

- Rename HttpServer to FileServer to remove confusing.
- Support log rotate
- Delete old PID files when stop Seafile

Web

- Enable deleting of personal messages
- Improved notification
- Upgrade pdf.js
- Password protection for sharing links
- [Admin] Create multi-users by uploading a CSV file
- Sort libraries by name/date
- Enable users to put an additional message when sending a sharing link
- Expiring time for sharing links
- [fix] Send notification to all users participating a group discussion
- Redesigned file viewing page
- Remove simplejson dependency
- Disable the ability to make a group public by default (admin can turn it on in settings)

3.0

3.0.4 (2014.06.07)

- [API] Add replace if exist into upload-api
- Show detailed error message when Gunicorn failed to start
- Improve object and block writting performance
- Add retry when failed getting database connection
- [fix] Use hash value for avatar file names to avoid invalid file name
- [fix] Add cache for repo_crypto.js to improve page speed
- [fix] Show error message when change/reset password of LDAP users
- [fix] Fix "save to my library" when viewing a shared file
- [fix, API] Fix rename file names with non-ascii characters

3.0.3

- [fix] Fix an UI bug in selecting multiple contacts in sending message
- Library browser page: Loading contacts asynchronously to improve initial loading speed

3.0.2

- [fix] Fix a bug in writing file metadata to disk, which causing "file information missing error" in clients.
- [fix] Fix API for uploading files from iOS in an encrypted library.
- [fix] Fix WebDAV
- [fix] Fix API for getting groups messages containing multiple file attachments
- [fix] Fix bug in HttpServer when file block is missing
- [fix] Fix login error for some kind of Android

3.0.1

- [fix] Fix showing bold/italic text in .seaf format
- [fix] Fix UI problem when selecting contacts in personal message send form
- [fix] Add nickname check and escape nickname to prevent XSS attack
- [fix] Check validity of library name (only allow a valid directory name).

3.0.0

Web

- Lots of small improvements in UI
- Translations
- [fix] Handle loading avatar exceptions to avoid 500 error

Platform

- Use random salt and PBKDF2 algorithm to store users' password. (You need to manually upgrade the database if you using 3.0.0 beta2 with MySQL backend.)

3.0.0 beta2

Web

- Handle 413 error of file upload
- Support cross library files copy/move
- Fixed a few api errors

Platform

- Allow config httpserver bind address
- [fix] Fix file ID calculation
- Improved device (desktop and mobile clients) management
- Add back webdav support
- Add upgrade script

3.0.0 beta

Platform

- Separate the storage of libraries
- Record files' last modification time directly
- Keep file timestamp during syncing
- Allow changing password of an encrypted library

Web

- Redesigned UI
- Improve page loading speed

2.2

2.2.1

- [fix] Fixed creation of admin account

2.2.0

- Add more checking for the validity of users' Email
- Use random salt and PBKDF2 algorithm to store users' password.

2.1

2.1.5

- Add correct mime types for mp4 files when downloading
- [fix] [Important] set correct file mode bit after uploading a file from web.
- Show meaningful message instead of "auto merged by system" for file merges
- Improve file history calculation for files which were renamed

WebDAV

- Return last modified time of files

2.1.4

- [fix] Fix file share link download issue on some browsers.
- [wiki] Enable create index for wiki.
- Hide email address in avatar.
- Show "create library" button on Organization page.
- [fix] Further improve markdown filter to avoid XSS attack.

2.1.3

- [api] Add more web APIs
- Incorporate Viewer.js to display opendocument formats
- [fix] Add user email validation to avoid SQL injection
- [fix] Only allow `<a>`, `<table>`, `<img>` and a few other html elements in markdown to avoid XSS attack.
- Return sub-libraries to the client when the feature is enabled.

2.1.2

- [fix] Fixed a bug in update script

2.1.1

- Allow the user to choose the expiration of the session when login
- Change default session expiration age to 1 day
- [fix] Fixed a bug of copying/moving files on web browsers
- [fix] Don't allow script in markdown files to avoid XSS attacks
- Disable online preview of SVG files to avoid potential XSS attacks
- [custom] Support specify the width of height of custom LOGO
- Upgrade scripts support MySQL databases now

2.1.0

Platform

- Added FUSE support, currently read-only
- Added WebDAV support
- A default library would be created for new users on first login to seahub

Web

- Redesigned Web UI
- Redesigned notification module
- Uploadable share links
- [login] Added captcha to prevent brute force attack
- [fix] Fixed a bug of "trembling" when scrolling file lists
- [sub-library] User can choose whether to enable sub-library
- Improved error messages when upload fails
- Set default browser file upload size limit to unlimited

Web for Admin

- Improved admin UI
- More flexible customization options
- Online help is now bundled within Seahub

2.0

2.0.4

- [fix] set the utf8 charset when connecting to database
- Getting users from both database and LDAP
- [web] List all contacts when sharing libraries
- [admin] List database and LDAP users in sysadmin

2.0.3

- [fix] Speed up file syncing when there are lots of small files

2.0.2

- [fix] Fix CIFS support.
- [fix] Support special characters like '@' in MySQL password
- [fix] Fix create library from desktop client when deploy Seafile with Apache.
- [fix] Fix sql syntax error in ccnet.log, issue #400
  (https://github.com/haiwen/seafile/issues/400).
- [fix] Return organization libraries to the client.
- Update French, German and Portuguese (Brazil) languages.

2.0.1

- [fix] Fix a bug in sqlite3 upgrade script
- Add Chinese translation

2.0.0

Platform

- New crypto scheme for encrypted libraries
- A fsck utility for checking data integrity

Web

- Change owner of a library/group
- Move/delete/copy multiple files
- Automatically save draft during online editing
- Add "clear format" to .seaf file online editing
- Support user delete its own account
- Hide Wiki module by default
- Remove the concept of sub-library

Web for Admin

- Change owner of a library
- Search user/library

API

- Add list/add/delete user API

1.8

1.8.5

- [bugfix] Fix "can't input space" bug in .seaf files
- Add pagination for online file browsing

1.8.3

- [bugfix] Fix bug in setup-seafile-mysql.sh
- Make reset-admin script work for MySQL
- Remove redundant log messages
- Fixed bugs in web API

1.8.2

- Add script for setting up MySQL
- [bugfix] Fixed a bug when sharing a library to another user without sending HTTP_REFERER

1.8.1

- [bugfix] Fixed a bug when generating shared link

1.8.0

Web

- Improve online file browsing and uploading
  - Redesigned interface
  - Use ajax for file operations
  - Support selecting of multiple files in uploading
  - Support drag/drop in uploading
- Improve file syncing and sharing
  - Syncing and sharing a sub-directory of an existing library.
  - Directly sharing files between two users (instead of generating public links)
  - User can save shared files to one's own library
- [wiki] Add frame and max-width to images
- Use 127.0.0.1 to read files (markdown, txt, pdf) in file preview
- [bugfix] Fix pagination in library snapshot page
- Set the max length of message reply from 128 characters to 2000 characters.
- Improved performance for home page and group page
- [Admin] Add administration of public links

API

- Add creating/deleting library API

Platform

- Improve HTTPS support, now HTTPS reverse proxy is the recommend way.
- Add LDAP filter and multiple DN
- Case insensitive login
- Move log files to a single directory
- [security] Add salt when saving user's password
- [bugfix] Fix a bug in handling client connection

1.7

1.7.0.2 for Linux 32 bit

- [bugfix] Fix "Page Unavailable" when view doc/docx/ppt.

1.7.0.1 for Linux 32 bit

- [bugfix] Fix PostgreSQL support.

1.7.0

Web

- Upgrade to Django 1.5
- Add personal messaging
- Support cloud_mode to hide the "organization" tab
- Support listing/revoking syncing clients
- [bugfix] Fix a bug in Markdown undo/redo
- [pro-edition] Searching in a library
- [pro-edition] Redesign file activities
- [pro-edition] Redesign doc/ppt/pdf preview with pdf2htmlEX

Daemon

- Support PostgreSQL
- [bugfix] fix bugs in GC

1.6

1.6.1

Web

- [bugfix] Fix showing personal Wiki under French translation
- [bugfix] Fix showing markdown tables in Wiki
- [bugfix] Fixed wiki link parsing bug when page alias contains dot.
- Disable sharing link for encrypted libraries
- [admin] improved user-add, set/revoke admin, user-delete

Daemon

- [controller] Add monitor for httpserver

1.6.0

Web

- Separate group functions into Library/Discuss/Wiki tabs
- Redesign Discussion module
- Add Wiki module
- Improve icons
- Can make a group public
- [editing] Add toolbar and help page for Markdown files
- [editing] A stable rich document editor for .seaf files
- [bugfix] Keep encryption property when change library name/desc.

For Admin

- Add --dry-run option to seafserv-gc.
- Support customize seafile-data location in seafile-admin
- Do not echo the admin password when setting up Seafile server
- seahub/seafile no longer check each other in start/stop scripts

API

- Show file modification time
- Add update file API

1.5

1.5.2

- [daemon] Fix problem in DNS lookup for LDAP server

1.5.1

- [web] Fix password reset bug in Seafile Web
- [daemon] Fix memory leaks in Seafile server

1.5.0

Seafile Web

- Video/Audio playback with MediaElement.js (Contributed by Phillip Thelen)
- Edit library title/description
- Public Info & Public Library page are combined into one
- Support selection of file encoding when viewing online
- Improved online picture view (Switch to prev/next picture with keyboard)
- Fixed a bug when doing diff for a newly created file.
- Sort starred files by last-modification time.

Seafile Daemon

- Fixed bugs for using httpserver under https
- Fixed performance bug when checking client's credential during sync.
- LDAP support
- Enable setting of the size of the thread pool.

API

- Add listing of shared libraries
- Add unsharing of a library.

Seafile Professional Server Changelog

6.2

From 6.2, It is recommended to use WSGI mode for communication between Seahub and Nginx/Apache. Two steps are needed if you'd like to switch to WSGI mode:

1. Change the config file of Nginx/Apache.
2. Restart Seahub with `./seahub.sh start` instead of `./seahub.sh start-fastcgi`

The configuration of Nginx is as following:

```
location / {
        proxy_pass          http://127.0.0.1:8000;
        proxy_set_header    Host $host;
        proxy_set_header    X-Real-IP $remote_addr;
        proxy_set_header    X-Forwarded-For $proxy_add_x_forwarded_for;
        proxy_set_header    X-Forwarded-Host $server_name;
        proxy_read_timeout  1200s;

        # used for view/edit office file via Office Online Server
        client_max_body_size 0;

        access_log      /var/log/nginx/seahub.access.log;
        error_log       /var/log/nginx/seahub.error.log;
    }
```

The configuration of Apache is as following:

```
    # seahub
    SetEnvIf Authorization "(.*)" HTTP_AUTHORIZATION=$1
    ProxyPass / http://127.0.0.1:8000/
    ProxyPassReverse / http://127.0.0.1:8000/
```

6.2.0 beta (2017.10.16)

- Add report charts for daily active users, daily file operations, and usage space
- Add "admin" permision when sharing a library to another user/group
- Redesign login page, adding a background image.
- Clean the list of languages
- Add the ability of tagging a snapshot of a library (Use `ENABLE_REPO_SNAPSHOT_LABEL = True` to turn the feature on)
- [Admin] Add an option to enable users to share a library to any groups in the system.
- Use WSGI as the default mode for deploying Seahub.

- Add a field Reference ID to support changing users primary ID in Shibboleth or LDAP
- Improved performance of loading library list
- Use multi-threads in search indexing
- [fix] Fix a bug when indexing a PDF larger than 10MB
- Support adding a custom user search function (https://github.com/haiwen/seafile-docs/commit/115f5d85cdab7dc272da81bcc8e8c9b91d85506e)
- Other small UI improvements
- [fix] Fix ADFS support

6.1

You can follow the document on minor upgrade (http://manual.seafile.com/deploy/upgrade.html).

6.1.9 （2017.09.28）

- [fix] Fix some bugs in realtime backup server
- Add option to set up Seafile HTTP server thread number
- [fix] Fix create new file API when create a file with a same name with exist file
- [fix] Fix a bug in permission check in file syncing
- Add more detailed log information when permission check error
- [fix] Add log to the size of queue of library size calculation
- [fix] Use customized logo when sending email notifications

6.1.8 (2017.08.18)

- [fix] Fix license checking

6.1.7 (2017.08.17)

- [fix] Fix a bug when concurrent uploading/creating files (in the old version, when a user uploading/deleting multiple files in cloud file browser, it had a high chance to get "internal server error" message)
- [fix] Fix thumbnails for some images that 90 degrees rotated
- [fix] Fix support for resumable file upload
- [fix] Fix MySQL connection pool in Ccnet
- [fix] Use original GIF file when view GIF files
- [fix, API] Check if name is valid when creating folder/file
- Remove deleted libraries in search index
- Use 30MB as the default value of THUMBNAIL_IMAGE_SIZE_LIMIT
- [API] Improve performance when move or copy multiple files/folders
- [admin] Support syncing user role from AD/LDAP attribute

(https://manual.seafile.com/deploy_pro/ldap_role_sync.html)

- [admin] Support deleting all outdated invitations at once
- [admin] Improve access log
- [admin] Support upload seafile-license.txt via web interface (only for single machine deployment)
- [admin] Admin can cancel two-factor authentication of a user
- [admin, role] Show user's role in LDAP(Imported) table
- [admin, role] Add wildcard support in role mapping for Shibboleth login
- [admin] Improve performance in getting total file number, used space and total number of devices
- [admin] Admin can add users to an institution via Web UI
- [admin] Admin can choose a user's role when creating a user

6.1.4 (2017.07.11)

- [API] Improve performance of getting unread notifications.
- Delete deleted libraries in search index
- Use user's languange as lang setting for OnlyOffice

6.1.3 (2017.07.06)

- Add context menu "details" to libraries and folders, so you can get how many files in a library or a folder.
- Improve search result accuracy
- [fix] Fix a bug in zip downloading an empty folder
- Improve performance of multiple file copy and move
- Admin can delete out-dated guest invitations
- [fix] Fix a bug in seafile-gc "dry run" option
- Users can restore deleted libraries by their own
- Change default block size for files uploaded via web browser to 8MB.

6.1.2 (deprecated)

6.1.1 (2017.06.19)

- Add "online preview only" option to share links
- Enable setting favicon and logo via admin panel

6.1.0 beta (2017.06.06)

Web UI Improvement:

1. Add thumbnail for video files (turn off by default)

2. Improved image file view, using thumbnail to view pictures
3. Move items by drap & drop
4. Add create docx/xlsx/pptx in web interface
5. Add OnlyOffice integration
6. Show which client modify a file in history, this will help to find which client accidentally modified a file or deleted a file.

Improvement for admins:

1. Admin can set default quota for each role
2. Admin can set user's quote, delete users in bulk in admin panel
3. Support using admin panel in mobile platform
4. Add translation for settings page
5. Add admin operation logs
6. Admin can change users' login_id in web interface
7. Admin can create libraries in admin panel
8. Admin can set logo and favicon in admin panel

System changes:

1. Remove wiki by default (to turn it on, set `ENABLE_WIKI = True` in seahub_settings.py)
2. Upgrade Django to 1.8.18
3. Clean Ajax API
4. Increase share link token length to 20 characters
5. Upgrade jstree to latest version
6. Update ElasticSearch to 2.4.5

6.0

You can follow the document on minor upgrade (http://manual.seafile.com/deploy/upgrade.html).

Special note for upgrading a cluster:

In version 6.0, the folder download mechanism has been updated. This requires that, in a cluster deployment, seafile-data/httptemp folder must be in an NFS share. You can make this folder a symlink to the NFS share.

```
cd /data/haiwen/
ln -s /nfs-share/seafile-httptemp seafile-data/httptemp
```

The httptemp folder only contains temp files for downloading/uploading file on web UI. So there is no reliability requirement for the NFS share. You can export it from any node in the cluster.

6.0.13 (2017.05.08)

- [fix] Fix in file moving/copying dialog, self-owned libraries are not listed
- [fix] Fix files in self-owned libraries are not listed when searching files in all libraries
- Update timestamp in about dialog

6.0.12 (2017.04.17)

- Improve performance when checking group shared library permission
- [fix] Fix image popup in favourite page
- [fix] Fix generating sharing link with expiring time in file detailed view page
- [fix] Don't allow to create library with '/' in name
- [fix] Fix two-factor authentication
- Add script to migrate between different storage backend

6.0.11 (Deprecated)

6.0.10 (2017.04.07)

- [fix] Fix a bug in listing libraries in admin panel

6.0.9 (2017.04.01)

- Show user' name instead of user's email in notifications sent out by email
- Add config items for setting favicon, disable wiki feature
- Add css id to easily hide user password reset and delete account button
- [fix] Fix UI bug in restoring a file from snapshot
- [fix] Fix after renaming a file, the old versions before file rename can't be downloaded
- [security] Fix XSS problem of the "go back" button in history page and snapshot view page
- [fix] Fix crash problem of seaf-import
- Add API to create/delete/modify an account in Org
- [AD/LDAP Sync] Support import posix group
- [fix] Fix Office Web App co-authoring problems when opening file in a shared sub-folder
- [fix] Fix "IE 9 not supported" popup message not showing

6.0.8 (2017.02.23)

Improvement for admin

- Admin can add/delete group members
- Admin can create group in admin panel
- Force users to change password if imported via csv

- Support set user's quota, name when import user via csv
- Set user's quota in user list page
- Add search group by group name
- Use ajax when deleting a user's library in admin panel
- Support logrotate for controller.log
- Add a log when a user can't be find in LDAP during login, so that the system admin can know whether it is caused by password error or the user can't be find
- Delete shared libraries information when deleting a user
- Add admin API to create default library for a user
- [ldap-sync] Support syncing users from AD/LDAP as inactive user

Other

- [fix] Fix user search when global address book is disabled in CLOUD_MODE
- [fix] Avoid timeout in some cases when showing a library trash
- Show "the account is inactive" when an inactive account try to login
- [security] Remove viewer.js to show open document files (ods, odt) because viewer.js is not actively maintained and may have potential security bugs
- [fix] Exclude virtual libraries from storage size statistics
- [fix] Fix mysql gone away problem in seafevents
- Add region config option for Swift storage backend
- [anti-virus] Send notification to the library owner if a virus is found

6.0.7 (2017.01.18)

- Set users role from Shibboleth affiliation attribute (https://manual.seafile.com/deploy/shibboleth_config.html, search "Affiliation and user role")
- [fix] Uploading files with special names lets seaf-server crash
- [fix] Fix reading database connection pool setting from ccnet.conf and seafile.conf
- [fix] Fix total storage integer overflow, which is shown at the info page of admin panel)
- [fix] Fix the password reset email gets send to the primary account email instead of the contact email of the profile.
- [fix] Do not check path existence when delete user/group folder permission
- Support ADFS
- [fix] Invitation email subject does not get translated

6.0.6 (2017.01.11)

- Guest invitation: Prevent the same address can be invited multiple times by the same inviter and by multiple inviters
- Guest invitation: Add an regex to prevent certain email addresses be invited (see https://github.com/haiwen/seafile-docs/blob/master/deploy_pro/roles_permissions.md#more-about-guest-invitation-

[feature](#))

- Office online: support co-authoring
- Admin can set users' department and name when creating users
- Show total number of files and storage in admin info page
- Show total number of devices and recently connected devices in admin info page
- Delete shared libraries information when deleting a user
- Upgrade Django to 1.8.17
- Admin can create group in admin panel
- [fix] Fix quota check: users can't upload a file if the quota will be exceeded after uploading the file
- [fix] Fix quota check when copy file from one library to another
- Add `# -*- coding: utf-8 -*-` to seahub_settings.py, so that admin can use non-ascii characters in the file.
- [fix] Prevent admin from access group's wiki
- [fix] Prevent transfering libraries to guest account
- [fix] Prevent guest accout to create share link via API v2
- Add a log when a user can't be find in LDAP during login, so that the system admin can know whether it is caused by password error or the user can't be find
- Ingore white space character in the end of lines in ccnet.conf

6.0.5 (2016.12.19)

- [fix] Fix generating of password protected link in file view page
- [fix] Fix .jpg/.JPG image display in IE10
- Export quota usage in export Excel in user list admin page
- [fix] Fix admin can't delete broken libraries
- Add "back to previous page" link in trash page, history page
- [fix] Fix file encoding for text file editing online
- [fix] Don't show operation buttons for broken libraries in normal users page
- [fix] Support both `[Audit]` and `[AUDIT]` in seafevent.conf
- [fix] Support utf-8 characters in filename when preview in MSOffice WebApp
- Support Collabora Online 2.0

6.0.4 (2016.11.29)

- [fix] Fix list_inner_pub_repos error in cloud mode
- [fix] Improve logo show in About dialog
- [fix] Fix file/folder upload in Firefox 50
- [fix] Fix groups not shown in admin panel when there are more than 100 groups

6.0.3 (2016.11.17)

- [fix] Fix the shared folder link in the notification message when a user share a folder to

another user
- [fix] Update Django version from 1.8.10 to 1.8.16
- [fix] Fix the shared folder name is not changed after removing the old share, renaming the folder and re-sharing the folder
- [fix] Fix sub-folder accidentially show the files in parent folder when the parent folder contains more than 100 files
- [fix] Fix image preview navigation when there are more than 100 entries in a folder
- [fix] Fix jpeg image display in IE10
- [fix] Fix bug when admin searching unexisting user
- Add support for online view of mov video files
- Make web access token expiring time configurable
- Add an option on server to control block size for web upload files
- [fix] Failed to cache (set/get) WOPI_ACCESS_TOKEN_EXPIRATION due to memcached key length limit
- [fix] Not allow user to set the permissions onto unshared folder. Because it is useless.
- [fix] Fix condition check when display share icon for guest user
- Support full-text search and audit log by default
- [fix] Fix permission dialog bug when the corresponding user/group deleted

6.0.2 (2016.10.20)

- [fix] Virus scan fails when the keystone token has expired
  https://github.com/haiwen/seafile/issues/1737
- [fix] If you share a sub-folder to a group, the sub-folder will appear as a library in that group page. Don't show "permission" menu item for such a shared sub-folder on the group page, because setting permissions on this shared sub-folder not work. The user should set permissions on the original library directly.
- [fix] Fix API for uploading file by blocks (Used by iOS client when uploading a large file)
- [fix] Fix a database connection problem in ccnet-server
- [fix] Fix moved files are still present in local folder until refresh
- [fix] Fix admin panel can't show deleted libraries

6.0.1 beta

- Enable create a library from a template
- Enable office preview by default in installation script
- [fix] Fix not able to move files via WebDAV interface
- Check whether the quota will exceed before saving the uploaded file to Seafile via Web UI or API
- [fix] Fix owner can't restore a deleted file or folder in snapshot
- [fix] Fix UI of personal profile page
- [fix] Fix in some cases mobile devices can't be unlinked
- [fix] Fix connection problem for the latest MariaDB in initialisation script

- Make maxNumberOfFiles configurable
- [fix] Remember the sorting of libraries
- Add Finnish translation
- Video + audio no longer be limited by max preview size

6.0.0 beta

- Add full screen Web UI
- Add file comment
- Improve zip downloading by adding zip progress
- Change of navigation labels
- Support Seafile Drive client
- [admin] Add group transfer function in admin panel
- [admin] Admin can set library permissions in admin panel
- Improve checking the user running Seafile must be the owner of seafile-data. If seafile-data is symbolic link, check the destination folder instead of the symbolic link.
- [UI] Improve rename operation
- Show name/contact email in admin panel and enable search user by name/contact email
- Add printing style for markdown and doc/pdf
- The "Seafile" in "Welcome to Seafile" message can be customised by SITE_NAME
- Improve sorting of files with numbers
- [API] Add admin API to only return LDAP imported user list
- Code clean and update Web APIs
- Remove number of synced libraries in devices page for simplify the interface and concept
- Update help pages
- [online preview] The online preview size limit setting FILE_PREVIEW_MAX_SIZE will not affect videos and audio files. So videos and audio with any size can be previewed online.
- [online preview] Add printing style for markdown

Pro only features

- Support LibreOffice online/Collabora Office online
- Add two-factor authentication
- Remote wipe (need desktop client 6.0.0)
- [Anti-virus] Support parallel scan
- [Anti-virus] Add option to only scan a file with size less than xx MB
- [Anti-virus] Add option to specific which file types to scan
- [Anti-virus] Add scanning virus instantly when user upload files via upload link
- [online preivew] Add printing style for doc/pdf
- [online preivew] Warn user if online preview only show 50 pages for doc/pdf with more

than 50 pages
- [fix] Fix search only work on the first page of search result pages
- Users can invite guests
- Add role based permission control
- Add term and conditions: admin can write a document of term and conditions. The user must accept it before using Seafile.

5.1

You can follow the document on minor upgrade (http://manual.seafile.com/deploy/upgrade.html).

Warning: when upgrade from 5.1.7 or lower version to 5.1.8+, you need to install python-urllib3 (or python2-urllib3 for Arch Linux) manually:

```
# for Ubuntu
sudo apt-get install  python-urllib3
# for CentOS
sudo yum install python-urllib3
```

5.1.11 (2016.08.29)

- [fix, security] Fix a bug in permission checking when searching a single library
- Add search user by name and contact email
- Show licensed to information in web UI

5.1.10 (2016.07.12)

- [fix] Fix a bug in showing license file information
- [multi-institution] Enable institution admin to activate/inactive an user
- [fix] Showing contact email in user auto-completion
- [fix, multi-tenancy] Fix syncing sub-folder of a shared library
- [fix, multi-tenancy] Fix file audit page broken when a group corresponding to an item is deleted
- [fix] Fix seaf-fsck.sh --export fails without database
- [fix] Fix users with Umlauts in their display name breaks group management and api2/account/info on some special Linux distribution
- Remove user from groups when a user is deleted.
- File lock only valid for 12 hours
- [fix] Fix can't generate shared link for read-only shared library
- [fix] Fix can still view file history after library history is set to "no history".
- [fix] Fix after moving or deleting multiple selected items in the webinterface, the buttons are lost until reloading

- Check user before start seafile. The user must be the owner of seafile-data directory
- Don't allow emails with very special characters that may containing XSS string to register
- [fix] Fix migrate from community edition to pro edition

5.1.9 (deprecated)

5.1.8 (2016.06.14)

- [fix] Fix "page unavailable" when anonymous user visiting a share link when there are organization libraries
- [fix] Remove bundled python-urllib3 that may cause problems in some systems. In CentOS 7 and ubuntu 16.04 you will need to install python-urllib3 manully.
- [fix] During downloading multiple files/folders, show "Total size exceeds limits" instead of "internal server error" when selected items exceeds limits.
- [fix] When delete a share, only check whether the be-shared user exist or not. This is to avoid the situation that share to a user can't be deleted after the user be deleted.
- Add a notificition to a user if he/she is added to a group
- [multi-institution] Add a page to show the admins of an institution
- [multi-institution] Add the function to search a user in an institution

5.1.7 (2016.06.08)

- [fix] Fix file locking for files with space in name when editing office files via Office Web App
- Improve UI for password change page when forcing password change after admin reset a user's password
- [LDAP Sync] Don't deactivate users by default if a user is removed from LDAP server. (DEACTIVE_USER_IF_NOTFOUND = True to turn it on)
- The profile popup dialog show the contact email if it is set
- [fix] Fix duplicated files show in Firefox if the folder name contains single quote '
- Add OFFICE_WEB_APP_SERVER_CA setting item to enable visiting OWA server with a self-signed certificate

5.1.6 (2016.05.30)

- [security] Fix permission checking for generating share links
- Add an option (ENABLE_SETTINGS_VIA_WEB) to ignore settings via Web UI (system admin->settings)
- [fix] Fix rendering of some pdf files in Chrome via adding `font-variant-ligatures: no-common-ligatures`
- [fix] Making user search (used in auto-completion) case insensitive

5.1.5 (2016.05.24)

- [fix] Fix page error in display file audit log when the corresponding library is deleted for a log entry and the path is the root of the library
- [fix] Fix clicking avatar not show profile popup in admin page
- Remove the traffic statistic link (to seafile.com) in profile popup
- [Fix] Fix delayed activation of Shibboleth users
- [Fix] Fix logging the user's email in audit log for share link when the link is a root of a library
- [OWA] Support visiting OWA server with a client side SSL certificate file

5.1.4 (2016.05.17)

- Download multiple files from Seahub as a ZIP-file
- [fix] Bug that caused groups cannot be transfered is fixed
- [fix, admin] Fix page error in display file audit log when the corresponding library is deleted for a log entry
- [fix] fixed raw downloads not being count towards traffic quota.
- Show a notification in the client and Seahub when a new library is shared to a group.
- Use seafile-data/http-temp to store zip files when downloading a directory or folder
- [Accessibility] Improve accessiblity of library history page by making links for operations selectable by tab.
- [Accessibility] Improve accessiblity of dialogs, add missing "labelledby" properties for the whole dialog.
- Support at most 10 LDAP/AD servers
- Add deactivation of an account on the seafile database user if a number of failed login is attemped.
- [admin] The share link list in system admin now can be sorted by time
- For un-login users, ask to providing an email before visiting download/upload links, and log the user's email in audit log. This is feature can be turn on by adding `ENABLE_SHARE_LINK_AUDIT` in seahub_settings.py

5.1.3 (2016.04.27)

- [fix] Fix group rename
- [UI] Remember the expanded status of groups
- [accessibility] Improve accessiblity of library trash page
- [accessibility] Improve file/folder upload menu
- list all devices in admin panel
- list device syncing errors in admin panel
- Support server side file content encryption
- Support xlsx/pptx editing via OWA
- Add syslog support for seafile.log

5.1.2 (2016.04.21)

- [fix] Fix saving avatar to database
- [fix] A few UI fixes

Accessiblity improvement

- Use standard checkbox instead of styled checkbox based on image
- Make library/folder/file operation icons visible on focus
- Make operation icons focusable
- Add aria-label to operation icons
- Make library/folder sort operations focusable
- Add role (navigation, banner, main) to regions
- Make dropdown menu items focusable

5.1.1 beta (2016.04.13)

- [fix] Fix file link in search result
- [fix] Fix setting of "require strong password" via web interface
- API: Add API to get audit log
- Sending email when import users from a CSV file

5.1.0 beta (2016.04.08)

Dependency update:

- Upgrade to django 1.8
- Update jquery to v1.11
- [ceph] Update librados to 0.9.4

Web

- Redesign navigation
- Rewrite group management
- Improve sorting for large folder
- Remember the sorting option for folder
- Improve devices page
- Update icons for libraries and files
- Remove library settings page, re-implement them with dialogs
- Remove group avatar
- Don't show share menu in top bar when multiple item selected
- Auto-focus on username field when loading the login page
- Remove self-introduction in user profile
- Force the user to change password if adding by admin or password reset by admin
- disable add non-existing user to a group

- Add an option for disable forcing users to change password (FORCE_PASSWORD_CHANGE, default is True)
- Support new Shibboleth users be created as inactive and activated via Admin later (SHIB_ACTIVATE_AFTER_CREATION , default is True)

Pro only

- Support automatic file locking for office files
- Realtime backup (see http://manual.seafile.com/deploy_pro/real_time_backup.html)
- Sending emails in backend when importing users via CSV files
- Support Swift API
- seaf-gc support running in multi-thread mode
- [fix] Fix crash problem when visit S3/Swift via HTTPS
- [fix] Fix handling special characters in LDAP group sync

5.0

You can follow the document on major upgrade (http://manual.seafile.com/deploy/upgrade.html)

In Seafile 5.0, we have moved all config files to folder `conf` , including:

- seahub_settings.py -> conf/seahub_settings.py
- ccnet/ccnet.conf -> conf/ccnet.conf
- seafile-data/seafile.conf -> conf/seafile.conf
- [pro only] pro-data/seafevents.conf -> conf/seafevents.conf

If you want to downgrade from v5.0 to v4.4, you should manually copy these files back to the original place, then run minor_upgrade.sh to upgrade symbolic links back to version 4.4.

The 5.0 server is compatible with v4.4 and v4.3 desktop clients.

5.0.7 (2016.03.10)

- [security] Backport Django's fix for CVE-2016-2512 https://www.djangoproject.com/weblog/2016/mar/01/security-releases/
- [security] Improve randomness in password reset: using get_random_string from django.utils.crypto to replace Python's random library
- [UI] Restore file from Trash using Ajax
- [API] Add API to send share link via emails
- [API] Add API to get Office Web App link

5.0.6 (2016.03.02)

- Add ENABLE_USER_CREATE_ORG_REPO to enable/disable organization repo

creation.

- Change the Chinese translation of "organization"
- Use GB/MB/KB instead of GiB/MiB/KiB in quota calculation and quota setting (1GB = 1000MB = 1,000,000KB)
- Show detailed message if sharing a library failed.
- [Shibboleth] Support set user's name in Seafile from givenname and surname in Shibboleth.
- [fix] Fix JPG Preview in IE11
- [fix] Fix empty nickname during shibboleth login.
- [fix] Fix default repo re-creation bug when web login after desktop.
- [fix] Don't show sub-libraries at choose default library page, seafadmin page and save shared file to library page
- [fix] Seafile server daemon: write PID file before connecting to database to avoid a problem when the database connection is slow
- [fix] Don't redirect to old library page when restoring a folder in snapshot page
- [fix] Fix a bug in showing virus scan page
- [fix] Fix background notification email sending.
- [fix, cluster] Fix handling memcached server failover

5.0.5 (2016.01.29)

- Change the Chinese translation of "organization"
- [fix] Show "out of quota" instead of "DERP" in the case of out of quota when uploading files via web interface
- Get name, institution, contact_email field from Shibboleth
- [WebDAV] Don't show sub-libraries

5.0.4 (2016.01.20)

- Read/write fs objects with multiple threads when Ceph/S3 back end is used
- Support HTTPS connections to S3 back end.
- [fix] Fix unable to set a library to keep full history when the globally default keep_days is set.
- [fix] Improve the performance of showing library trash
- [fix] Fix downloading a file from a shared link when its path contain special characters
- [fix] Improve share icon
- Stop logging into logs/stats-logs
- Don's show "Access Log" for a file in the dropdown menu if audit log is not turned on.

5.0.3 (2015.12.28)

- Search user by name in case insensitive way
- Show broken libraries in user's library page (so they can contact admin for help)

- [fix] Fix LDAP sync problem
- [fix] Fix support for SQLite backend
- [fix] Fix PDFs under special folder name can't be viewed online
- [fix] Fix cache for thumbnail in sharing link
- [fix] Fix script for online GC
- [fix] Enable copy files from read-only shared libraries to other libraries
- [fix] Open image gallery popup in grid view when clicking the thumbnail image
- [fix] Fix issues in multi-tenancy mode
- [API] Add listing share upload links
- [API] Delete be-shared libraries

5.0.2 (2015.12.18)

- [UI] Improve UI of all groups page
- Don't allow sharing library to a non-existing user
- [fix, admin] Fix deleting a library when the owner does not exist anymore
- [fix] Keep file last modified time when copy files between libraries
- Enable login via username in API
- [UI] Improve markdown editor

Cluster

- [fix] Fix a read/write consistency bug in reading library latest commit from database

Improve seaf-fsck

- Do not set "repaired" mark
- Clean syncing tokens for repaired libraries so the user are forced to resync the library
- Record broken file paths in the modification message

Sharing link

- Remember the "password has been checked" information in session instead of memcached
- [security] Fix password check for visiting a file in password protected sharing link.
- Show file last modified time
- [fix] Fix image thumbnail in grid view
- [UI] Improve UI of grid view mode

5.0.1 (2015.12.07)

New features

- [admin] Show the list of groups an user joined in user detail page
- [admin] Add exporting user/group statistics into Excel file
- [admin] Admin can see the file number of a library

- [admin] Admin can disable the creation of encrypted library
- [admin] Admin can visit all non-encrypted libraries via Web UI (need to turn on `ENABLE_SYS_ADMIN_VIEW_REPO = True` in seahub_settings.py)
- [admin] Add license expiration notification
- [admin] A tool to debug LDAP/AD settings
- [admin] Use a new algorithm to run GC online, reducing database locking time.
- [admin] Enabling exporting audit logs to Excel file
- Enable searching inside a library
- User can see the access log of a file
- Showing libraries list in "All Groups" page
- Add importing group members from CSV file
- Add grid view for folder sharing link
- A trash for every folder, showing deleted items in the folder and sub-folders.

Account management improvement:

- Admin can set username (internally it is called login_id) for an user and enable login by username. (see the LDAP user sync document for how to sync user ID into login_id)
- Admin can set contact_email for users

```
Seafile uses email to uniquely identify an user. With these two features, you can sync
 LDAP username into login_id, sync LDAP email to contact_email, store username@domain-
name to Seafile's email field. With this config:
   * Users will be able to login via username
   * Email will be send to the contact email address
   * Seafile uses username@domain-name to uniquely identify an user.
```

UI changes:

- Change most png icons to icon font
- UI change of file history page
- UI change of library history page
- UI change of trash page
- UI change of sharing link page
- UI change of rename operation
- Don't open a new page when click the settings, trash and history icons in the library page
- Update Markdown editor and viewer
- other small UI improvements

Config changes:

- Move all config files to folder `conf`
- Add web UI to config the server. The config items are saved in database table (seahub-dab/constance_config). They have a higher priority over the items in config files.

Fixes

- [fix, admin] Fix searching libraries by name when some libraries are broken
- [security] Change most GET requests to POST to increase security
- [fix] Fix problem in deleting tmp files in virus scan
- [fix] Fix seaf-gc when seafile-data is stored in non-default location

5.0.0 (deprecated)

4.4

Note: Two new options are added in version 4.4, both are in seahub_settings.py

- SHOW_TRAFFIC: default is True, set to False if you what to hide public link traffic in profile
- SHARE_LINK_PASSWORD_MIN_LENGTH: default is 8

This version contains no database table change.

4.4.9 (2016.02.29)

- [fix] Show "out of quota" instead of "DERP" in the case of out of quota when uploading files via web interface

4.4.8 (2015.12.17)

- [security] Fix password check for visiting a file in folder sharing link

4.4.7 (2015.11.20)

- [fix] Fix viewing PDF files via Office Web App
- [fix, virus scan] Do not scanning deleted libraries in virus scan
- [fix, virus scan] Fix showing the virus scan page when libraries containing scanned items are deleted
- [virus scan] Add more debug information for virus scan
- [fix] Clean cache when set users' name from web API
- [fix] Fix a performance problem for generating picture thumbnails from folder sharing link

4.4.6 (2015.11.09)

- [security] Fix a XSS problem in raw sharing link
- [fix] Delete sharing links when deleting a library

- [fix] Clean Seafile tables when deleting a library
- [fix] Add tag to the link in upload folder email notification
- [fix] Fix a bug in creating a library (after submit a wrong password, the submit button is no longer clickable)
- [fix, pro] Fix a bug in listing FileUpdate audit log
- [security, pro] Don't online preview for office files in encrypted libraries

4.4.5 (2015.10.30)

- [fix] Fix a bug in deleting sharing link in sharing dialog.

4.4.4 (2015.10.29)

- [fix] Fix support for syncing old formatted libraries
- Remove commit and fs objects in GC for deleted libraries
- Add "transfer" operation to library list in "admin panel->a single user"
- [fix] Fix the showing of the folder name for upload link generated from the root of a library
- [fix] Add access log for online file preview
- [fix] Fix permission settings for a sub-folder of a shared sub-folder

LDAP improvements and fixes

- Only import LDAP users to Seafile internal database upon login
- Only list imported LDAP users in "organization->members"
- Add option to not import users via LDAP Sync (Only update information for already imported users). The option name is IMPORT_NEW_USER. See document http://manual.seafile.com/deploy/ldap_user_sync.html

4.4.3 (2015.10.20)

- [fix] Remove regenerate secret key in update script

4.4.2 (2015.10.19)

- [security] Check validity of file object id to avoid a potential attack
- [fix] Check the validity of system default library template, if it is broken, recreate a new one.
- [fix] After transfer a library, remove original sharing information
- [security] Fix possibility to bypass Captcha check
- [security] More security fixes.
- [pro] Enable syncing a sub-sub-folder of a shared sub-folder (For example, if you share library-A/sub-folder-B to a group, other group members can selectively sync sub-folder-B/sub-sub-folder-C)

- [fix, office preview] Handle the case that "/tmp/seafile-office-output"is removed by operating system

4.4.1 beta (2015.09.24)

- [fix] Fix a bug in setting an user's language
- [fix] Show detailed failed information when sharing libraries failed
- [API] Add API to list folders in a folder recursively
- [API] Add API to list only folders in a folder

4.4.0 beta (2015.09.21)

New features:

- Allow group names with spaces
- Enable generating random password when adding an user
- Add option SHARE_LINK_PASSWORD_MIN_LENGTH
- Add sorting in share link management page
- Other UI improvements

Pro only:

- Integrate Office Web Apps server
- Integrate virus scan
- Support resumable upload (turn off by default)
- Add option to hide public link traffic in profile (SHOW_TRAFFIC)

Fixes:

- [fix] Fix a bug that causing duplications in table LDAPImport
- set locale when Seahub start to avoid can't start Seahub problem in a few environments.

4.3

Note: this version contains no database table change from v4.2. But the old search index will be deleted and regenerated.

Note when upgrading from v4.2 and using cluster, a new option `COMPRESS_CACHE_BACKEND = 'locmem://'` should be added to seahub_settings.py

4.3.4 (2015.09.14)

- [fix] Fix a bug in file locking
- [fix] Fix sub-folder permission check for file rename/move

- [fix] Fix a bug in active number of users checking
- Show total/active number of users in admin panel
- Counts all downloads into traffic statistics
- [security] Use POST request to handle password reset request to avoid CSRF attack
- Don't show password reset link for LDAP users
- [UI] Small improvements

4.3.3 (2015.08.21)

- [fix, important] Bug-fix and improvements for seaf-fsck
- [fix, important] Improve I/O error handling for file operations on web interface
- Update shared information when a sub-folder is renamed
- [fix] Fix bug of list file revisions
- [fix] Fix syncing sub-folder of encrypted library
- Update translations
- [UI] Small improvements
- [fix] Fix modification operations for system default library by admin

4.3.2 (2015.08.12)

- Update translations
- [fix] Fix bug in showing German translation
- [fix] Fix bug when remove shared link at library settings page
- [fix] Fix api error in opCopy/opMove
- Old library page (used by admin in admin panel): removed 'thumbnail' & 'preview' for image files

4.3.1 (2015.07.31)

- [fix] Fix generating image thumbnail
- [UI] Improve UI for sharing link page, login page, file upload link page
- [security] Clean web sessions when reset an user's password
- Delete the user's libraries when deleting an user
- Show link expiring date in sharing link management page
- [admin] In a user's admin page, showing libraries' size and last modify time
- [fix, API] Fix star file API
- [pro, beta] Add "Open via Client" to enable calling local program to open a file at the web

About "Open via Client": The web interface will call Seafile desktop client via "seafile://" protocol to use local program to open a file. If the file is already synced, the local file will be opened. Otherwise it is downloaded and uploaded after modification. Need client version 4.3.0+

4.3.0 (2015.07.25)

Usability improvements

- [UI] Improve ui for file view page
- [UI] Improve ui for sorting files and libraries
- Redesign sharing dialog
- Enable generating random password for sharing link
- Remove direct file sharing between users (You can use sharing link instead)

Pro only features:

- Add file locking
- [fix] Fix file name search for Chinese and other Asia language
- [fix] Support special password for MySQL database in seafevents

Others

- [security] Improve permission check in image thumbnail
- [security] Regenerate Seahub secret key, the old secret key lack enough randomness
- Remove the support of ".seaf" format
- [API] Add API for generating sharing link with password and expiration
- [API] Add API for generating uploading link
- [API] Add API for link files in sharing link
- Don't listen on 10001 and 12001 by default.
- Change the setting of THUMBNAIL_DEFAULT_SIZE from string to number, i.e., use `THUMBNAIL_DEFAULT_SIZE = 24` , instead of `THUMBNAIL_DEFAULT_SIZE = '24'`

4.2

Note: because Seafile has changed the way how office preview work in version 4.2.2, you need to clean the old generated files using the command:

```
rm -rf /tmp/seafile-office-output/html/
```

4.2.4 (2015.07.08)

- More fix on showing share link management page
- Fix a bug on doc/ppt preview
- Fix a bug in reading last login time

4.2.3 (2015.07.07)

- Fix translation problem for German and other language

- Remove "open locally" feature. It needs more testing
- Fix a problem in showing share link management page

4.2.2 (2015.07.03)

- [fix] Fix file uploading link
- Add LDAP user sync
- Improve preview for office files (doc/docx/ppt/pptx)

In the old way, the whole file is converted to HTML5 before returning to the client. By converting an office file to HTML5 page by page, the first page will be displayed faster. By displaying each page in a separate frame, the quality for some files is improved too.

4.2.1 (2015.06.30)

Improved account management

- Add global address book and remove the contacts module (You can disable it if you use CLOUD_MODE by adding ENABLE_GLOBAL_ADDRESSBOOK = False in seahub_settings.py)
- List users imported from LDAP
- [Guest] Enable guest user by default
- [Guest] Guest user can't generate share link
- Don't count inactive users as licensed users

Important

- [fix] Fix viewing sub-folders for password protected sharing
- [fix] Fix viewing starred files
- [fix] Fix support of uploading multiple files in clients' cloud file browser
- Improve security of password resetting link
- Remove user private message feature

New features

- Enable syncing any folder for an encrypted library
- Add open file locally (open file via desktop client)

Others

- [fix] Fix permission checking for sub-folder permissions
- Change "quit" to "Leave group"
- Clean inline CSS
- Use image gallery module in sharing link for folders containing images
- [API] Update file details api, fix error
- Enable share link file download token available for multiple downloads

- [fix] Fix visiting share link whose original path is deleted
- Hide enable sub-library option since it is not meaningless for Pro edition

4.2.0 (2015.05.29)

Pro only updates

- [new] Support set permission on every sub-folder
- [Search] Support partial match like "com" matching "communication" in file name
- [Search] The search result page is much clean

Usability

- Add direct file download link
- Remove showing of library description
- Don't require library description
- Keep left navigation bar when navigate into a library
- Generate share link for the root of a library
- Add loading tip in picture preview page

Security Improvement

- Remove access tokens (all clients will log out) when a users password changed
- Temporary file access tokens can only be used once
- sudo mode: confirm password before doing sysadmin work

Platform

- Use HTTP/HTTPS sync only, no longer use TCP sync protocol
- Support byte-range requests
- Automatically clean of trashed libraries
- [LDAP] Save user information into local DB after login via LDAP

4.1

4.1.2 (2015.05.07)

- [fix] Fix bug in syncing LDAP groups
- [fix] Fix bug in viewing PDF/Doc
- [fix] Fix crash bug when memcache is full

4.1.1 (2015.04.16)

- [fix] Fix Webdav's port can't be changed to non default port (8082)
- [fix, searching] Fix handling invalid path name when indexing

- [fix] Fix seaf-fsck for swift/s3/ceph backend
- Do not show "this type of file can't be viewed online"
- [fix] Fix showing of activity feed in mobile device
- [fix] Fix viewing sharing link for deleted directories
- Log email sending in background task to seahub_email_sender.log
- Improve shibboleth login by supporting "next" parameter in URL

4.1.0 (2015.04.01)

Pro only updates

- Support syncing any sub-folder in the desktop client
- Add audit log, see http://manual.seafile.com/security/auditing.html. This feature is turned off by default. To turn it on, see
  http://manual.seafile.com/deploy_pro/configurable_options.html
- Syncing LDAP groups
- Add permission setting for a sub-folder (beta)

Updates in community edition too

- [fix] Fix image thumbnail in sharing link
- Show detailed time when mouse over a relative time
- Add trashed libraries (deleted libraries will first be put into trashed libraries where system admin can restore)
- Improve seaf-gc.sh
- Redesign fsck.
- Add API to support logout/login an account in the desktop client
- Add API to generate thumbnails for images files
- Clean syncing tokens after deleting an account
- Change permission of seahub_settings.py, ccnet.conf, seafile.conf to 0600
- Update Django to v1.5.12

4.0

4.0.6 (2015.03.06)

- [fix] Fix the seafevents not shutdown by seafile.sh problem
- Improved shibboleth support
- [fix] Fix uploading a directory if the top directory only contains sub-folders (no files)
- Improve thumbnail API

4.0.5 (2015.02.13)

- [fix] Fix a crash problem when a client tries to upload corrupted data
- Add image thumbnails

4.0.4 (2015.02.05)

Important

- [fix] Fix transfer library error in sysadmin page
- [fix] Fix showing of space used in sysadmin page for LDAP users
- [fix] Fix preview office files in file share links and private share
- Improved trash listing performance

Small

- [webdav] list organisation public libraries
- Disable non-shibboleth login for shibboleth users
- [fix] Fix wrong timestamp in file view page for files in sub-library
- Add Web API for thumbnail
- Add languages for Thai and Turkish, update a few translations
- [LDAP] Following referrals

4.0.3 (2015.01.15)

- [fix] Fix memory leak in HTTP syncing
- Repo owner can restore folders/files from library snapshot
- Update translations
- [LDAP] Make the "page result" support turn off by default to be compatible with community edition.
- Only repo owner can restore a library to a snapshot
- [fix] Remote redundant logs in seaf-server
- [fix] Raise 404 when visiting an non-existing folder
- [fix] Enable add admin when LDAP is enabled
- Add API to get server features information (what features are supported by this server)
- [fix] Fix throttle for /api2/ping

4.0.2 (2015.01.06)

- [fix] Fix syncing sub-library with HTTP protocol

4.0.1 (2014.12.29)

- Add Shibboleth support (beta)
- Improve libraries page loading speed by adding cache for library
- [fix] Fix performance problem of FUSE when using ceph/swift backend

- [fix] Fix folder upload by drap&drop
- [fix] Fix version check for pro edition
- [fix] Fix performance problem in listing files API
- [fix] Fix listing files of a large folder
- [fix] Fix folder sharing link with password protection
- [fix] Fix deleting broken libraries in the system admin panel

4.0.0 (2014.12.13)

- Add HTTP syncing support
- Merge FileServer into seaf-server
- [web] New upload file dialog
- [search] Improve the speed of search by removing in-efficient code in calculating file modification time in the search result page.

3.1

3.1.13 (2014.11.25)

- Add WMV video file preview on web
- Support office documents online preview in cluster deployment
- [fix] Fix file private sharing bug when file name contains &

3.1.12 (2014.11.17)

- Update ElasticSearch to v1.4
- Limit content search of txt file to 100KB.
- Fix "out of memory" problem.

3.1.11 (2014.11.03)

- [fix] Fixed ./seaf-gc.sh to run online GC
- [fix] Fixed showing libraries with same name in WebDAV extension in some specific Python version
- [fix] Fixed event timestamp for library creation and library deleting events
- [fix] Don't allow setting an encrypted library as default library
- [fix] Don't list unregistered contacts in sharing dialog
- Don't list inactive users in "organization->members"
- [multi-tenancy] Add webdav support
- Autoupload files when added in web interface

3.1.10 (2014.10.27)

- Online GC: you don't need to shutdown Seafile server to perform GC
- [fix] Fixed performance problem in WebDAV extension
- [fix] Fixed quota check in WebDAV extension
- [fix] Fixed showing libraries with same name in WebDAV extension
- Add "clear" button in a library's trash
- [fix] Fix small errors when upload files via Web interface
- [fix] Fix moving/coping files when the select all file checkbox is checked
- [Multi-tenancy] Listing libraries of an organization
- [Multi-tenancy] Enable rename an organization
- [Multi-tenancy] Prevent the deleting of creator account of an organisation

3.1.9 (2014.10.13)

- [LDAP] split LDAP and Database in organization -> pubuser
- [LDAP] Support pagination for loading users from LDAP
- [Multi-tenancy] fix quota related bugs
- [Office Preview] Fix seafevents not start bug when using Python v2.6

3.1.7, 3.1.8

- Add support for multi-tenancy

3.1.6 (2014.09.16)

- Add access.log for file download
- [Fix, API] Fix bug in group creation

3.1.5 (2014.09.13)

- Add multi-tenancy support

3.1.4 (2014.09.11)

- [Fix] Fix bug in uploading >1GB files via Web
- [Fix] Remove assert in Ccnet to avoid denial-of-service attack
- [Fix] Add the missing ./seaf-gc.sh
- Support two modes of license, life-time and subscription

3.1.3 (2014.08.29)

- [Fix] Fix multi-file upload in upload link and library page
- [Fix] Fix libreoffice file online view
- Add 'back to top' for pdf file view.

- [Fix] Fix "create sub-library" button under some language
- [Fix popup] Fix bug in set single notice as read.
- Add message content to notification email

3.1.2 (2014.08.27)

- [fix] Fix support for guest account
- [Fix, security] Fix permission check for PDF full screen view
- [Fix] Fix copy/move multiple files in web
- Improve UI for group reply notification
- Improve seaf-fsck, seaf-fsck now can fix commit missing problem
- [Security improve] Access token generated by FileServer can only be used once.

3.1.1 (2014.08.18)

- [fix] Fix memory leak
- [fix] Fix a memory not initialized problem which may cause sync problem under heavy load.
- [fix, search] Closing database connection first before indexing

3.1.0 (2014.08.15)

Pro edition only:

- [search] Enable searching directories
- [search] Enable search groups in organization tab
- [search] Enable encrypted libraries (filename only)
- [search, fix] Fix a bug when indexing a large library
- [preview,fix] Fix document preview for Excel files in sharing links
- [user] Enable add users as guests. Guests are only able to use libraries shared to him/her.
- [user] Enable set users password strength requirement
- [sharing link] Enable set expiring time for sharing links
- [sharing link] Library owner can manage all share links from this library

Syncing

- Improve performance: easily syncing 10k+ files in a library.
- Don't need to download files if they are moved to another directory.

Platform

- Rename HttpServer to FileServer to remove confusing.
- Support log rotate
- Use unix domain socket in ccnet to listen for local connections. This isolates the access

to ccnet daemon for different users.

- Delete old PID files when stop Seafile
- Remove simplejson dependency
- [Fix] fix listing libraries when some libraries are broken
- Add a bash wrapper for seafile-gc

Web

- Enable deleting of personal messages
- Improved notification
- Upgrade pdf.js
- Password protection for sharing links
- [Admin] Create multi-users by uploading a CSV file
- Sort libraries by name/date
- Enable users to put an additional message when sending a sharing link
- Expiring time for sharing links
- [fix] Send notification to all users participating a group discussion
- Redesigned file viewing page
- Remove simplejson dependency
- Disable the ability to make a group public by default (admin can turn it on in settings)
- Add "Back to Top" button in file view page
- Improve page refreshing after uploading files

3.0

3.0.7

- Add support for logrotate
- [fix] Fix script for migrating from community edition

3.0.6

- Fix seahub failing to start problem when Ceph backend is used

3.0.5

- Add option to enable highlight search keyword in the file view
- [fix] Fix "Save to My Library" in file sharing
- [fix] Fix API for renaming files containing non-ASCII characters from mobile clients

3.0.4

- Add support for MariaDB Cluster

3.0.3

Web

- Show a notice when one tries to reset/change the password of a LDAP user
- Improve the initial size of pdf/office documents online preview
- Handle languages more gracefully in search
- Highlight the keywords in the search results
- [Fix] Fixed a web page display problem for French language

Platform

- Improve the speed when saving objects to disks
- Show error messages when seahub.sh script failed to start

3.0.2

- Added Ceph storage backend support
- Use random ID as avatar file name instead of the file name uploaded by the user

3.0.1

- [fix] Fix an UI bug in selecting multiple contacts in sending message
- Library browser page: Loading contacts asynchronously to improve initial loading speed

3.0.0

Web

- Redesigned UI
- [admin] Add login log
- [admin] Add share link traffic statistics
- [fix] Handle loading avatar exceptions to avoid 500 error
- Fixed a few api errors
- Improve page loading speed
- [fix] Fix UI problem when selecting contacts in personal message send form
- [fix] Add nickname check and escape nickname to prevent XSS attack
- [fix] Check validity of library name (only allow a valid directory name).

Platform

- Separate the storage of libraries
- Record files' last modification time directly
- Keep file timestamp during syncing
- Allow changing password of an encrypted library
- Allow config httpserver bind address

- Improved device (desktop and mobile clients) management

Misc

- [fix] Fix API for uploading files from iOS in an encrypted library.
- [fix] Fix API for getting groups messages containing multiple file attachments
- [fix] Fix bug in HttpServer when file block is missing
- [fix] Fix login error for some kind of Android

2.2

2.2.1

- Add more checking for the validity of users' Email
- Use random salt and PBKDF2 algorithm to store users' password.

2.1

2.1.5

- Add correct mime types for mp4 files when downloading
- [fix] [Important] set correct file mode bit after uploading a file from web.
- Show meaningful message instead of "auto merged by system" for file merges
- Improve file history calculation for files which were renamed

WebDAV

- Return last modified time of files

2.1.4-1

- [fix] fixed the `pro.py search --clear` command
- [fix] fixed full text search for office/pdf files

2.1.4

- Improved Microsoft Excel files online preview
- [fix] Fixed file share link download issue on some browsers.
- [wiki] Enable create index for wiki.
- Hide email address in avatar.
- Show "create library" button on Organization page.
- [fix] Further improve markdown filter to avoid XSS attack.

2.1.3

- Fixed a problem of Seafile WebDAV server

2.1.2

- Fixed a problem of requiring python boto library even if it's not needed.

2.1.1

Platform

- Added FUSE support, currently read-only
- Added WebDAV support
- A default library would be created for new users on first login to seahub
- Upgrade scripts support MySQL databases now

Web

- Redesigned Web UI
- Redesigned notification module
- Uploadable share links
- [login] Added captcha to prevent brute force attack
- [login] Allow the user to choose the expiration of the session when login
- [login] Change default session expiration age to 1 day
- [fix] Fixed a bug of "trembling" when scrolling file lists
- [sub-library] User can choose whether to enable sub-library
- Improved error messages when upload fails
- Set default browser file upload size limit to unlimited

Web for Admin

- Improved admin UI
- More flexible customization options
- Support specify the width of height of custom LOGO
- Online help is now bundled within Seahub

2.0

2.0.5

- Support S3-compatible storage backends like Swift
- Support use existing elasticsearch server

2.0.4

- [fix] set the utf8 charset when connecting to database
- Use users from both database and LDAP
- [admin] List database and LDAP users in sysadmin

2.0.3

- [fix] Speed up file syncing when there are lots of small files

2.0.1

- [fix] Elasticsearch now would not be started if search is not enabled
- [fix] Fix CIFS support.
- [fix] Support special characters like '@' in MySQL password
- [fix] Fix create library from desktop client when deploy Seafile with Apache.
- [fix] Fix sql syntax error in ccnet.log, issue #400 (https://github.com/haiwen/seafile/issues/400).
- [fix] Return organization libraries to the client.
- Update French, German and Portuguese (Brazil) languages.

2.0.0

Platform

- New crypto scheme for encrypted libraries
- A fsck utility for checking data integrity

Web

- Change owner of a library/group
- Move/delete/copy multiple files
- Automatically save draft during online editing
- Add "clear format" to .seaf file online editing
- Support user delete its own account
- Hide Wiki module by default
- Remove the concept of sub-library

Web for Admin

- Change owner of a library
- Search user/library

API

- Add list/add/delete user API

1.8

1.8.3

- Improve seahub.sh
- Improve license checking

1.8.2

- fixed 'cannot enter space' bug for .seaf file online edit
- add paginating for repo files list
- fixed a bug for empty repo

1.8.1

- Remove redundant log messages

1.8.0

Web

- Improve online file browsing and uploading
    - Redesigned interface
    - Use ajax for file operations
    - Support selecting of multiple files in uploading
    - Support drag/drop in uploading
- Improve file syncing and sharing
    - Syncing and sharing a sub-directory of an existing library.
    - Directly sharing files between two users (instead of generating public links)
    - User can save shared files to one's own library
- [wiki] Add frame and max-width to images
- Use 127.0.0.1 to read files (markdown, txt, pdf) in file preview
- [bugfix] Fix pagination in library snapshot page
- Set the max length of message reply from 128 characters to 2000 characters.

API

- Add creating/deleting library API

Platform

- Improve HTTPS support, now HTTPS reverse proxy is the recommend way.
- Add LDAP filter and multiple DN
- Case insensitive login
- Move log files to a single directory

- [security] Add salt when saving user's password
- [bugfix] Fix a bug in handling client connection
- Add a script to automate setup seafile with MySQL

1.7

1.7.0.4

- Fixed a bug in file activities module

1.7.0

- First release of Seafile Professional Server

Seafile Client Changelog

Known bugs and limitations

v6.1.0 is the latest stable release. It is compatibile with server 5.x and 6.x.

The Mac Finder sync extension need OSX 10.10+

6.1

6.1.3 (2017/11/03)

- [fix] Fix system tray icon
- Change "Shibbeloth Login" to "Single Sign On"
- [fix] Fix MacOS client using discrete GPU
- [cloud file browser] Improve file uploading after modification
- [cloud file browser, fix] Don't show quota exceeded when server return 502 error
- [cloud file browser] Show number of files in current folder

6.1.2 (2017/10/28)

- [Win] Update system tray icon
- Return error if repo name contains invalid characters when syncing a library
- Update local folder name when repo name is changed.
- Leave a shared library
- [fix] Fix open cloud file browser from activity view
- [fix] Fix loading more events in activity tab
- [fix, cloud file browser] Always watching local cached files after uploading failed when file changed
- [fix, cloud file browser] Use local cached version if it is changed locally

6.1.1 (2017/09/20)

- Improve support for syncing EML files (Don't sync EML files if only timestamp changed)
- Improve support for Copy/Paste files in cloud file browser
- [Mac] Fix opening file history from Mac
- [fix] Fix memory leak in Windows extension handler
- [fix] Fix re-login with Shibboleth
- UI/UX improvements for cloud file browser
- [fix, Windows] Fix a bug in detecting whether there is an old instance of Seafile running

6.1.0 (2017/08/02)

- [fix] Fix a bug that library name will be changed back when it is changed in the server
- [fix] Fix a bug that uploading progress exceeding 100%.
- [fix] Fix selectively synced subfolder disappear after logout and login again
- Use new library icons
- [fix] Fix showing of avatars
- [fix] Improve UI in Windows with high DPI screens
- Only allow https for Shibboleth login
- Clean unused logs in applet.log
- Remove the function of map a library to a network drive
- [fix] Fix an issue when uploading a deep empty folder like "A/B/C"
- Change default block size to 8MB
- [fix, mac] Popup a notification after user clicking the "Check new version" button in about dialog if the current version is the latest version

6.0

6.0.7 (2017/06/23)

- [fix] Fix auto-completion in sharing dialog
- Show contact avatars in auto-completion of sharing dialog
- [fix] Fix mis-leading error message when uploading a file to a read-only library via cloud file browser
- Add highlight background color when drag and drop a file/folder to a library
- [fix] Fix connection error in libcurl
- [fix] Fix sorting by time in cloud file browser
- [fix] Fix sorting by name case sensitive in cloud file browser
- [fix] Fix drag more than one folder to cloud file browser
- Add loading more in activity tab and search tab
- "View sync error" can only be clicked when there are sync errors
- Move seafile.log, applet.log to seafile.log.old, applet.log.old if they become too large
- Remove the "?" icon in creating new folder dialog title bar

6.0.6 (2017/05/08)

- Sort files by numbers if numbers contained in the file name, so "1, 10, 2, 11, 3" will be sorted as "1, 2, 3, 10, 11".
- Use native system window for Seafile main window and cloud file browser window.
- Fix progress overflow when uploading large file using cloud file browser
- Improve the tip when removing an account in the client
- Don't show download button when select folders in cloud file browser

- Clean cache data of cloud file browser when logout an account or restart the client
- [fix] Fix display problem for high screen Windows in win10
- [fix] Fix libssl compatibility problem in Debain Stretch
- Add auto-update check

6.0.4 (2017/02/21)

- [fix] Fix Shibboleth login support
- Improve network connection check
- Don't log "read pipe error" into log file
- [fix] Fix the link for help page
- Improve library sharing dialog (pro edition only feature)

6.0.3 (2017/02/11)

- Add a dialog to list all sync errors
- Don't popup file is locked by other users error message
- Make sync error message more accurate
- [win] Support intermediate CA
- [cloud file browser] Show correct error message when quota is exceeded during file upload
- Show the server address during Shibboleth login
- Support pre-config Shibboleth server address in seafile.ini
- [fix] Show the recent shared user in sharing dialog
- "open folder" changed to "open local folder"

6.0.2 (deprecated)

This version has a few bugs. We will fix it soon.

6.0.1 (2016/12/07)

- Don't generate case conflict file/folder
- [fix] Fix popup style for Mac Sierra
- Show image thumbnail in cloud file browser
- Change label "organization" to "shared with all", "private shares" to "shared with me"

6.0.0 (2016/10/14)

- [fix] Fix a conflict problem with ESET anti-virus program
- Fix client name and add client version in modification history
- Add remote wipe support
- [fix] Fix sub-folder permission support

5.1

5.1.4 (2016/07/29)

- [fix] Fix seaf-daemon crash if root dir is corrupted
- [fix, pro] Fix auto-completion in sharing a folder to a user if the user name contains a space

5.1.3 (2016/06/27)

- Support syncing any sub-folder with a community server
- [fix, win] Fix automatically unlocking office files
- [fix, pro] Fix auto-completion in sharing a folder to a user
- auto-login for open file history in web
- Prevent generating too many "case conflict" files

5.1.2 (2016/06/07)

- Add context menu to view file history in web
- [fix, pro] Fix user auto-completion in folder sharing dialog
- [Linux] Fix tray icon not shown in KDE 5 https://github.com/haiwen/seafile-client/issues/697
- [win 10, fix] Fix explorer context menu has no right arrow
- [win, fix] Can't create new files/folders in "My Library" Shortcut
- [win, fix] Fix on Windows 10 sometimes the seafile client main window exceeds the height of the screen.

5.1.1 (2016/05/04)

- Add "Groups" category in the client's library view
- Click notification pop up now open the exact folder containing the modified file.
- Change "Get Seafile Share Link" to "Get Seafile Download Link"
- [Fix] Use case-insensitive sorting in cloud file browser
- [Fix] Don't sync a folder in Windows if it contains invalid characters instead of creating an empty folder with invalid name
- [Fix] Fix a rare bug where sometimes files are synced as zero length files. This happens when another software doesn't change the file timestamp after changing the content of the file.

5.1.0 (2016/04/11)

Note: Seafile client now support HiDPI under Windows, you should remove QT_DEVICE_PIXEL_RATIO settings if you had set one previous.

- Update to QT5.6
- Add HiDPI support
- Remove corrupted local metadata when unsync or resync a library

5.0

5.0.7 (2016/03/29)

- [fix, mac] Enable multi-users running Seafile on Mac
- [win, pro] auto-lock office files (doc/ppt/excel) when open, require Seafile pro edition v5.1.0+
- Enable using system proxy setting
- Auto login when viewing unread notifications
- Record device name to modification history

5.0.6 (2016/03/08)

- [fix, mac] Fix deleted folder get re-uploaded if with .DS_Store inside
- [fix] Fix loading proxy configuration during start-up
- [fix] Fix a crash bug when using libcurl with multiplt https connection
- [fix] Fix sync problem when the network connection is slow
- Use GB/MB/KB instead of GiB/MiB/KiB (1GB = 1000MB = 1,000,000KB)
- [fix] Fix disappear of synced sub-folder from the main window
- Small UI improvements

5.0.5 (2016/02/20)

- [fix] Fix a crash bug in multi-threaded file download/upload

5.0.4 (2016/01/26)

- Add crash report support
- [win] Add mapping a synced library as a network drive

5.0.3 (2016/01/13)

- [fix] Fix German translation

5.0.2 (2016/01/11)

- [fix] Fix compatibility issue with F-Secure
- Add setting sync interval for a library

- Showing progress when downloading file list during the first-time syncing

5.0.1 (2015/12/21)

- [fix] Fix a memory leak
- Show user name instead of email in the profile area
- [pro] For pro users, you can manage the library sharing from the client now.

5.0.0 (2015/11/25)

- Show storage usage
- Support login via username
- Set current tab icon color to orange
- Send notifications when sync error happens for some files
- Improve file locking for Microsoft Office files
- [fix] Fix preventing syncing with any folder if it is prevented by the server
- [Windows] Set TCP send buffer size and TCP_NODELAY options
- [fix] Keep ignore files when deleting a folder
  (https://github.com/haiwen/seafile/issues/1383)

4.4

4.4.2 (2015/10/20)

- [fix] Fix showing data transfer percentage in syncing.
- Add open containing folder in search result

4.4.1 (2015/10/14)

- [fix, win] Fix a rare bug in file sync on Windows related to multi-thread downloading

4.4.0 (2015/09/18)

- Fix bugs in file ignore feature
- Fix popup two password input dialogs when visit an encrypted library
- Popup a tip when file conflicts happen
- Don't send the password to server when creating an encrypted library
- [Mac] Fix support for TLS 1.2
- [Win, extension] Add context menu "get internal link"
- Enable uploading of an empty folder in cloud file browser
- [pro] Enable customization of app name and logo for the main window (See
  https://github.com/haiwen/seafile-

docs/blob/master/config/seahub_customization.md#customize-the-logo-and-name-displayed-on-seafile-desktop-clients-seafile-professional-only)
- A few small UI improvements

4.3

4.3.4 (2015/09/14)

- Fix a bug in refresh file locking status icon
- Use 3 threads instead of 10 threads when syncing files to reduce load on server

4.3.3 (2015/08/25)

- Fix one more syncing issues introduced in v4.3.0
- Improve the file lock icon
- Improve cloud file browser
- Fix icon overlay problem in win10
- Add back sync with existing folder

4.3.2 (2015/08/19)

- Fix more syncing issues introduced in v4.3.0
- Update translation
- Fix ignore feature
- Add HiDPI icons for cloud file browser

4.3.1 (2015/08/11)

- Fix syncing issues.

4.3.0 beta (2015/08/03)

- [fix, windows] Fix a bug that causes freeze of Seafile UI
- [sync] Improve index performance after a file is modified
- [sync] Use multi-threads to upload/download file blocks
- [admin] Enable config Seafile via seafile.rc in Mac/Linux or seafile.ini in Windows (https://github.com/haiwen/seafile-user-manual/blob/master/en/faq.md)
- [admin] Enable uninstall Seafile without popup "deleting config files" dialog
- Add file lock
- [mac, extension] Add getting Seafile internal link
- [mac, extension] Improve performance of showing sync status

4.2

4.2.8 (2015/07/11)

- [win] Another fix on the explorer extension
- Improve the ui for downloading the encrypted library
- filebrowser: fix a crash when closed while context menu pop up
- explorer extension: show read-only badge when a file is read-only

4.2.7 (2015/07/08)

- [win] Fixed another bug that will cause crash of explorer extension
- [win] Add executable file version information for the client
- [mac] Use OS X native notification when possible (OS X >= 10.8)
- [mac] Implement sync status improvement for every files
- filebrowser: fix uploading failures in the folders with permission set
- filebrowser: support "save as" multiple files simultaneously
- filebrowser: fix the sorting of folders
- filebrowser: implement get seafile internal link
- shibboleth: popup ShiLoginDialog when doing relogin
- [ui] disable the inputablity of computer name when doing login

4.2.6 (2015/06/25)

- [win] Fixed more memory problem that will cause crash of explorer extension

4.2.5 (2015/06/24)

- [win] Fixed a possible memory corruption in explorer extension
- [win] Add icon for readonly state in explorer extension
- [win] unconfigured clients now can hide the configuration wizard
- [win] ui: improve set password dialog
- [win] fix broken local DNS resolve
- [mac] add "seafile://" protocol support
- [UI] tweak search tab item padding
- Add a menu item to open seafile folder
- [UI] don't change current account after logout
- [UI] fix some bugs on account-view
- [UI] improve account management
- filebrowser: support readonly directories
- [fix] Fix creating subfolder for password-protected repo
- [fix] Fix file size integer overflow in search results

4.2.4 (2015/06/11)

- [win] add workarounds with auto update bugs in cloud browser
- [win] add the missing support for ipv6 (curl)
- [pro] add new tab to searching files
- [osx] fix the regularly disappearance tray icon (Qt5.4.2)
- [win] [osx] fix broken network connection sometimes after resume (Qt5.4.2)
- add an option to syncing with an existing folder with a different name
- avoid race condition when quiting
- fix a bug with opening password-protected repo in cloud browser
- ui: tweak paddings in the event activities
- filebrowser: show file type correctly along with icons
- ui: improve repo item category
- ui: show download link in share link dialog
- ui: enhance event details

4.2.3 (2015/05/29)

- Improve self-signed CA support
- Auto login when click "view on cloud"
- [fix] Fix bugs with open directory from modification details dialog (pro)
- [fix] Fix incorrect transfer rates for each sync task
- [fix] Fix auto uploaded modified files in cloud file browser for some office files

4.2.2 (2015/05/26)

- [win] Use Openssl to handle HTTPS connection
- [Mac] Load trusted CA certificates from Keychain
- [fix] Fix logout/login issue (libraries stay at waiting for sync)
- [fix] Fix a file deletion problem in Mac client
- Ignore the others of ssl errors if we have dealt with one
- Expand env variable in preconfigure seafile directory
- Hide explorer extension option on other platforms than windows
- Cloud file browser: fix broken title bar when minimized on windows
- Remove unused option in setting dialog

4.2.1 (2015/05/14)

- [fix] Fix "Waiting for synchronization" problem
- [win] Fixed encoding problem in the explorer extension
- [win] Prefer home for seafile data dir when it is on the largest drive
- [win] Adopt preconfigure directory for initialization if any
- [win] Adopt preconfigure server addr for adding accounts if any

- [win] Open current repo worktree when clicking ballon message
- [mac] Fix some memory leaks
- Description is no longer required when creating repositories
- [fix] Fix webview url for server version >= 4.2.0
- redesign the event list in activity tab (pro)
- [fix] Fix window focus when creating repository from drag and drop
- [fix] filebrowser: fix sorting column kind for non-English users
- network: disable weak ciphers explicitly
- [fix] Fix a issue synced subfolders are not shown when client starts
- [fix] Remember the used server addresses for convenience
- [fix] Fix the ssl handshake errors with custom CA seafile servers

4.2.0 (2015/05/07)

- [win] Support overlay icons for files based on the sync status
- Use http syncing only
- Auto detect existing folders and prompt "syncing with existing folder" in first time syncing
- [win] Open desktop icon popup the main window if Seafile is already running
- Respect umask on Linux
- [fix] Fix main window stay outside screens problem
- [fix] Fix a few small syncing issues.
- [osx] Allow sharing root directory from finder extension
- Auto login from the client when click the server URL (need v4.2 server)
- Auto logout when the authorization is expired (require server supports)
- Auto detect existing folders in first time syncing
- Save server info persistently
- More miscellaneous fixes

4.1

4.1.6 (2015/04/21)

- [win] add overlay icon to show sync status at the library level
- [win] add an option to enable/disable explorer extension support
- [mac] add finder sync extension (need OSX 10.10.x)
- [mac] fix the broken hide-the-dock option in some cases
- [linux] fix the bug that we have two title bar for some desktop environment
- Update shibboleth support
- [cloud file browser] Pop notifications when new versions of cached files uploaded
- [cloud file browser] Add a save_as action
- [cloud file browser] Improve file browser's UI

- [fix] Fix a rare case of login failure by using complex password, a regression from 4.1.0
- [fix] Fix a rare case of program crash when changing accounts
- Update avatars automatically
- More miscellaneous fixes

4.1.5 (2015/04/09)

- Add Shibboleth login support
- Reset local modified files to the state in Server when resyncing a read-only library.
- [fix] Fix unable to unsync a library when it is in the state of uploading files
- [fix, win] handle file/directory locking more gracefully
- Add http user agent for better logging in Apache/Nginx
- [fix] Fix timeout problem in first time syncing for large libraries

4.1.4 (2015/03/27)

- [fix, win] Fix Windows explore crash by seafile extension when right clicking on "Libraries->Documents" at the right side

4.1.3 (2015/03/23)

- [fix] Fix unable to sync bug (permission denial) if the Windows system user name contains space like "test 123" introduced in v4.1.2
- [win] Update version of OpenSSL to 1.0.2a

4.1.2 (2015/03/19) (deprecated)

- Add logout/login support (need server 4.1.0+)
- fix proxy password disappearance after restarting issue
- mask proxy password in the setting dialog
- [Fix] fix unexpected disconnection with proxy servers
- [Fix] fix a conflicting case when we have read-only sharing repository to a group
- update translations
- support darkmode (OS X)
- and other minor fixes

4.1.1 (2015/03/03)

- Add network proxy support for HTTP sync
- [Mac] Add more complete support for retina screen
- Improve UI
- Add option for killing old Seafile instance when starting a new one
- Add experimental support for HiDPI screen on Windows and Linux

- Showing shared from for private shared libraries
- Use API token v2 for shibbloeth login
- [fix] Fix some bugs in uploading file from cloud file browser
- fix a bug of uploading directory from cloud file browser (pro version)

4.1.0 beta (2015/01/29)

- Add support for HDPI screen by using QT5
- [win] Add context menu for generating share link
- Enable changing of interface language
- Make http syncing the default option (will fall back to non-http sync automatically if the server does not support it)
- [fix] Fix a problem in handling long path in Windows

4.0

4.0.7 (2015/01/22)

- [win] support for file path greater than 260 characters.

In the old version, you will sometimes see strange directory such as "Documents~1" synced to the server, this because the old version did not handle long path correctly.

4.0.6 (2015/01/09)

- [fix] Fix a timeout problem during file syncing (Which also cause program crash sometimes).

4.0.5 (2014/12/24)

- [fix] [mac] More on fixing mac syncing problem
- [Linux, Mac] Do not ignore files with invalid name in Windows
- [fix] Fix "sync now"
- [fix] Handle network problems during first time sync
- [file browser] Support create folders
- [file browser] Improve interface
- [file browser] Support multiple file selection and operation

4.0.4 (2014/12/15)

- [fix] [mac] Fix a syncing problem when library name contains "è" characters
- [Windows] Gracefully handle file lock issue.

In the previous version, when you open an office file in Windows, it is locked by the operating system. If another person modify this file in another computer, the syncing will be stopped until you close the locked file. In this new version, the syncing process will continue. The locked file will not be synced to local computer, but other files will not be affected.

4.0.3 (2014/12/03)

- [fix] [mac] Fix a syncing problem when library name contains "è" characters
- [fix] Fix another bug in syncing with HTTP protocol

4.0.2 (2014/11/29)

- [fix] Fix bugs in syncing with HTTP protocol

4.0.1 (2014/11/18)

- [fix] Fix crash problem

4.0.0 (2014/11/10)

- Add http syncing support
- Add cloud file browser

3.1

3.1.12 (2014/12/01)

- [fix] Fix a syncing problem for files larger than 100MB.

3.1.11 (2014/11/15)

- [fix] Fix "sometimes deleted folder reappearing problem" on Windows.

You have to update all the clients in all the PCs. If one PC does not use the v3.1.11, when the "deleting folder" information synced to this PC, it will fail to delete the folder completely. And the folder will be synced back to other PCs. So other PCs will see the folder reappear again.

3.1.10 (2014/11/13)

- [fix] Fix conflict problem when rename the case of a folder
- [fix] Improve the deleted folder reappearing problem if it contains ignored files
- [fix] Add "resync" action

3.1.8 (2014/10/28)

- Better support read-only sync. Now local changes will be ignored.
- [Mac,Fix] Fix detection of local changes.

3.1.7 (2014/09/28)

- [fix] Fix another not sync problem when adding a big file (>100M) and several other files.

3.1.6 (2014/09/19)

- Add option to sync MSOffice/Libreoffice template files
- Add back choosing the "Seafile" directory when install Seafile client.
- Add option to change the address of a server
- Add menu item for open logs directory
- [Mac] Add option for hide dock icon
- Show read-only icon for read-only libraries
- Show detailed information if SSL certification is not valid
- Do not show "Seafile was closed unexpectedly" message when turning down of Windows
- Don't refresh libraries/starred files when the window is not visible
- Move local file to conflict file when syncing with existing folder
- Add more log information when file conflicts happen
- [fix] Fix sync error when deleting all files in a library
- [fix] Fix not sync problem when adding a big file (>100M) and several small files together.
- [fix] Fix Windows client doesn't save advanced settings

3.1.5 (2014/08/14)

- Do not ignore libreoffice lock files
- [fix] Fix possible crash when network condition is not good.
- [fix] Fix problem in syncing a large library with an existing folder
- Add option "do not unsync a library even it is deleted in the server"
- [mac] upgrade bundled openssl to 1.0.1i
- [mac] remove unused ossp-uuid dependency
- [mac] fix code sign issue under OSX 10.10

3.1.4 (2014/08/05)

- [fix, Mac] Fix case conflict problem under Mac

3.1.3 (2014/08/04)

- [fix] Fix showing bubble
- [Mac] More UI improvements
- Do not ignore 'TMP', 'tmp' files

3.1.2 (2014/08/01)

- Do not show rotate icon when checking update for a library
- Do not show activity tab if server not supported
- [Mac] show unread messages tray icon on Mac
- [Mac] Improve UI for Mac
- [fix] Support rename files from upper case to lower case or vice versa.

3.1.1 (2014/07/28)

- [Win] Fix crash problems
- [Win] Fix interface freeze problem when restoring the window from the minimized state
- Remove the need of selecting Seafile directory

3.1.0 (2014/07/24)

- Add starred files and activity history
- Notification on unread messages
- Improve icons for Retina screen
- Load and show avatar from server
- Use new and better icons

3.0

3.0.4

- [fix] Fix a syncing bug

3.0.3

- [fix] Fix syncing problem when update from version 2.x
- [fix] Fix UI when syncing an encrypted library

3.0.2

- [fix] Fix a syncing issue.

3.0.1

- Improved ssl check
- Imporved ui of sync library dialog
- Send device name to the server
- [fix] Fixed system shutdown problem
- [fix] Fixed duplicate entries in recently updated libraries list
- Remove ongoing library download tasks when removing an account
- Updated translation
- [fix] Fix file ID calculation

3.0.0

- Adjust settings dialog hint text size
- Improved login dialog

2.2

2.2.0

- Add check for the validity of servers' SSL Certification

2.1

2.1.2

- Show proper error message when failed to login
- Show an error message in the main window when failed to get libraries list
- Open seahub in browser when clicking the account url
- Add an option "Do not automatically unsync a library"
- Improve sync status icons for libraries
- Show correct repo sync status icon even if global auto sync is turned off
- Show more useful notification than "Auto merge by system" when conflicts were merged

2.1.1

- Make the main window resizable
- [windows] Improved tray icons
- Show detailed network error when login failed
- Show sub-libraries
- [windows] Use the name of the default library as the name of the virtual disk

2.1.0

- Redesigned the UI of the main window
- [windows] Download the default library, and creates a virtual disk for it in "My Computer"
- Support drag and drop a folder to sync
- Automatically check for new version on startup
- Support of file syncing from both inside and outside the LAN
- [fix] Fix a bug of clicking the tray icon during initialization
- [fix] fixed a few bugs in merge and handling of empty folders
- [mac] Fixed the alignment in settings dialog

2.0

2.0.8

- [fix] Fix UI freeze problem during file syncing
- Improve syncing speed (More improvements will be carried out in our next version)

2.0.7 (Don't use it)

Note: This version contains a bug that you can't login into your private servers.

- [fix] Fix a bug which may lead to crash when exiting client
- show library download progress in the library list
- add official server addresses to the login dialog
- improve library sync status icons
- [windows] use the same tray icon for all windows version later than Vista
- translate the bubble notification details to Chinese

2.0.6

- [Windows] Fix handling daylight saving time
- Improve library details dialog
- [fix] Fix a bug in api request
- Improve the handling of "Organization" libraries
- [fix] Fix the settings of upload/download rate limit
- [fix] Update French/German translations
- [cli] Support the new encryption scheme

2.0.5

- Improve UI
- Fix a bug in French translation

2.0.4

- Improve memory usage during syncing
- [Windows] Change system tray icons
- [Windows] Hide seafile-data under Seafile folder
- [fix] Fix remember main window's location
- Improve the dialog for adding account
- Add setting for showing main windows on seafile start up
- Open local folder when double click on a library
- Show warning dialog when login to a server with untrusted ssl certification

2.0.3

- sync empty folder
- support seafile crypto v2
- show warning in system tray when some servers not connected
- add German/French/Hungarian translations
- change system tray icons for Windows
- show "recent updated libraries"
- reduce cpu usage
- [fix] fixed a bug when login with password containing characters like "+" "#"
- ask the user about untrusted ssl certs when login
- add Edit->Settings and "view online help" menu item

2.0.2

- [Fix] Fix compatibility with server v1.8
- [Fix] the bug of closing the settings dialog
- Add Chinese translation
- Show error detail when login failed
- Remember main window position and size
- Improve library detail dialog
- Add unsync a library

2.0.0

- Re-implement GUI with Qt

1.8

1.8.1

- [bugfix] Fix a bug in indexing files

1.8.0

- [bugfix] Skip chunking error
- Improve local web interface
- Remove link to official Seafile server
- Ignore all temporary files created by Microsoft Office
- Add French and Slovak translation

1.7

1.7.3

- [bugfix] Fix a small syncing bug.

1.7.2

- [bugfix] Fix a bug in un-syncing library. https://github.com/haiwen/seafile/issues/270

1.7.1

- [win] Fix selecting of Seafile directory

1.7.0

- [win] Enable selecting of Seafile directory
- Enable setting of upload/download speed
- Use encrypted transfer by default
- Support ignore certain files by seafile-ignore.txt

1.6

1.6.2

- [bugfix,mac] Fix a bug in supporting directory names with accents

1.6.1

- [bugfix] Prevent running of multiple seaf-daemon instance
- Improve the efficiency of start-up GC for libraries in merge stage
- [mac,win] Handle case-conflict files by renaming

1.6.0

- [linux,mac] Support symbolic links
- [seaf-cli] clean logs
- Do not re-download file blocks when restart Seafile during file syncing
- [bugfix] Fix treating files as deleted when failed to create it due to reasons like disk full.

- [bugfix] Fix several bugs when shutdown Seafile during some syncing operation.

1.5

1.5.3

- Log the version of seafile client when start-up.
- [bugfix] Fix a bug when simultaneously creating an empty folder with same name in server and client.
- [bugfix] Always use IPv4 address to connect a server.

1.5.2

- [bug] Fix a memory-access bug when showing "Auto merge by seafile system" in bubble

1.5.1

- [Seaf-cli] Fix a bug in initializing the config dir.
- [bugfix] Improve the robustness of DNS looking-up. Use standard DNS looking-up instead of libevent's non-blocking version.

1.5.0

- Add Seaf-cli
- Check the correctness of password in the beginning of downloading a encrypted library.
- Show detailed information in bubble
- Enable change the server's address in the client
- [Linux] Do not popup the browser when start up
- Remove seafile-web.log

SeaDrive Client Changelog

Known issues

- In version 0.5.1, we add the feature that the mounted drive is only visible to the current user, so some exe files can't be executed if stored in the drive because it needs admin privilege to run
- In version 0.5.1, rename a non-cached folder or file will lead to sync error.
- In version 0.5.0 Copy exe files to SeaDrive on Win 7 will freeze the explorer

ChangeLog

0.8.1 (2017/11/03)

- Use "REMOVABLE" when mount the drive disk
- Prevent creating "System Volume Information"
- Some UI fixes

0.8.0 (2017/09/16)

- [fix] Reuse old drive letter after SeaDrive crash
- [fix] Fix rename library back to old name when it is changed in the server
- [fix] Fix sometimes network can not reconnected after network down
- Change default block size to 8MB
- Make auto-login as default
- Remount SeaDrive when it is unmounted after Windows hibernate

0.7.1 (2017/06/23)

- [fix] Fix a bug that causing client crash

0.7.0 (2017/06/07)

- Add support for multi-users using SeaDrive on a single desktop. But different users must choose different drive letters.
- Improve write performance
- [fix] When a non-cached file is locked in the server, the "lock" icon will be shown instead of the "cloud" icon.
- Add "automatically login" option in login dialog

- Add file transfer status dialog.

0.6.2 (2017/04/22)

- [fix] Fix after moving a file to a newly created sub folder, the file reappear when logout and login
- Refresh current folder and the destination folder after moving files from one library to another library
- [fix] Fix file locking not work
- [fix] Fix sometimes files can't be saved

0.6.1 (2017/03/27)

- [fix] Don't show a popup notification to state that a file can't be created in `s:` because a few programs will automatically try to create files in `s:`

0.6.0 (2017/03/25)

- Improve syncing status icons
- Show error in the interface when there are syncing errors
- Don't show rorate icon when downloading/uploading metadata
- [fix] Don't download files when the network is not connected

0.5.2 (2017/03/09)

- [fix] Rename a non-cached folder or file will lead to sync error.

0.5.1 (2017/02/16)

- [fix] Fix copying exe files to SeaDrive on Win 7 will freeze the explorer
- The mounted drive is only visible to the current user
- Add popup notification when syncing is done
- [fix] Fix any change in the settings leads to a drive letter change

0.5.0 (2017/01/18)

- Improve stability
- Support file locking
- Support sub-folder permission
- [fix] Fix 1TB limitation
- User can choose disk letter in settings dialog
- Support remote wipe
- [fix] Use proxy server when login

- Click system tray icon open SeaDrive folder
- Support application auto-upgrade

0.4.2 (2016/12/16)

- [fix] Fix SeaDrive initialization error during Windows startup

0.4.1 (2016/11/07)

- [fix] Fix a bug that lead to empty S: drive after installation.

0.4.0 (2016/11/05)

- [fix] Fix a bug that leads to generation of conflict files when editing
- Add translations
- Update included Dokany library to 1.0
- Don't show encrypted libraries even in command line
- Show permission error when copy a file to the root
- Show permission error when try to modify a read-only folder
- Show permission error when try to delete a folder in the root folder

0.3.1 (2016/10/22)

- Fix link for license terms
- Use new system tray icon
- Add notification for cross-libraries file move

0.3.0 (2016/10/14)

- Support selecting Drive letter
- Don't create folders like msiS50.tmp on Windows
- [fix] Fix cache size limit settings
- Correctly show the storage space if the space is unlimited on the server side.

0.2.0 (2016/09/15)

- Add shibboleth support
- Show a dialog notify the client is downloading file list from the server during initialisation
- Show transfer rate
- [fix] Fix a bug that lead to the file modification time to be empty
- [fix] Fix a bug that lead to files not be uploaded

0.1.0 (2016/09/02)

- Initial release